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#### ABSTRACT

Largely because of high student loan default rates, much of the criticism of federal aid programs has focused on policies and practices affecting the participation of proprietary schools in federal student aid. This report reviews alternative indicators of school performance that are currently used or could be used by the federal student aid programs. These indicators are considered appropriate for assessing proprietary schools, but they are likely to be applicable to other types of postsecondary institutions. The use of student loan default rates to set minimum standards for program eligibility is limited and inadequate for assessing institutional quality. A more comprehensive indicator of default rates, particularly a default rate based on the proportion of dollars in default and the percentage of students receiving federal loans, would give a more complete picture. New information on factors influencing institutions likely to misuse the student aid program or to fail are needed to develop valid profiles to identify high-risk institutions. More comprehensive assessments should consider program completion rates, attainment of occupational competency by students, and labor market performance. Student background may become a factor in the assessment process. Specific guidelines are given for short-term measures to improve institutional evaluation while a more comprehensive assessment system is being developed. Six tables summarize information on indicators. Two appendices summarize meetings with representatives of proprietary 3chools and occupational competency testing in proprietary schools. (SLD)

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#### BEYOND DEFAULTS:

INDICATORS FOR ASSESSING PROPRIETARY SCHOOL QUALITY

#### AUGUST 1991

This report was written by David Goodwin, under the supervision of Maureen McLaughlin and Alan Ginsburg of the Planning and Evaluation Service, Office of the Under Secretary. It was prepared to stimulate discussion of new policy directions in the federal student aid program. The findings and conclusions do not necessarily represent the official opinion or policy of the U.S. Department of Education. For further information, call David Goodwin or Maureen McLaughlin at 202-401-0182.



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# Beyond Defaults: Indicators for Assessing Proprietary School Quality

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#### **EXECUTIVE SUMMARY**

## BEYOND DEFAULTS: INDICATORS FOR ASSESSING PROPRIETARY SCHOOL QUALITY

Federal student aid programs have been severely criticized because they do not have sufficient accountability; are often poorly managed and inefficient; and in some cases, fail to serve the educational needs of students. The potential for huge profits tempts some schools to engage in significant financial abuse. Largely because of high student loan default rates, much of the criticism has focused on policies and practices affecting the participation of proprietary schools in federal student aid. To improve these programs, the U.S. Department of Education (ED), Congress, and others are reexamining the basic assumptions and principles that have guided federal student aid policy. Current problems in federal student aid, particularly those related to proprietary schools, have created an opportunity to consider bold new directions.

This report reviews alternative indicators of school performance that are currently used, or could be used by the federal student aid programs. Although the report focuses on performance indicators appropriate for assessing proprietary school performance, the approaches discussed are likely applicable to other types of postsecondary institutions as well. In preparing this report, ED held a series of meetings with proprietary school directors, associations, accrediting organizations, and technical experts.

The main findings of this report are as follows:

## **Improving the Current System**

The use of student loan default rates to set minimum standards for program eligibility represents a limited and inadequate basis for assessing institutional quality. The default rate may be an appropriate measure if the sole objective is to reduce defaults, but it is inadequate as a measure of institutional quality. A more comprehensive indicator of defaults is preferable.

- The elimination of institutions with high default rates from student aid, as required through recent legislation, constitutes a rudimentary system of performance indicators. Default rates have the advantage of being readily implemented with data that ED already collects, and, because the default rate is a single measure, it is easily understood. This approach has two main problems, however:
  - -- First, the borrower default rate is a very limited dimension of school performance that fails to separate poor schooling from other factors that may also be associated with high defaults.
  - -- Second, the current system uses only one measure of defaults--default rates based on the percentage of borrowers in default. Additional default indicators--in particular, a default rate based on the proportion of dollars in default and the percentage of students receiving federal loans--would give a more complete picture of the institution's experience. These indicators could be implemented quickly since they rely upon existing data.



In addition to defaults, the indicators that ED routinely uses to establish institutional eligibility for student aid--state licensing, accreditation, and a limited number of financial and administrative criteria--have not worked well at ensuring program quality and protecting students and taxpayers from abuse. Even so, ED has not fully used the indicator information it already collects.

- Reviews conducted by accrediting agencies and some state licensing agencies focus primarily upon indicators of school inputs--facilities and equipment, faculty training, curriculum, instruction methods, support services, procedures for assessing student progress, and space and facilities. Such indicators rely predominantly on subjective evidence and may be of varying quality. Previous studies of educational inputs, in general, have found a weak relationship between various school inputs, when they are measured quantitatively, and independent measures of school effectiveness.
  - -- Some accreditation agencies have collected data on student outcomes, but have not developed performance standards or tied results directly to accreditation decisions.
  - -- Improvements are not likely to come from new measures of school inputs, or from efforts to quantify their measurement. Although there are important issues regarding the function of accreditation and state licensing in student aid, they are beyond the scope of this report.
- Indicators of financial and administrative capacity currently employed are important to protect students from insolvent institutions, and to protect taxpayers from abuse of student aid funds--but their effectiveness, to date, is quite limited. Although more must be done with existing data to detect financial abuse and enforce existing rules of program eligibility, it is also necessary to obtain data that are more current and comprehensive, and to use these data more efficiently. Changes needed include:
  - -- More timely data. Because federal financial losses can mount rapidly once schools enter the student aid program, it is unwise to rely on financial information that is, in many cases, 18 months or more out of date. More timely data on Guaranteed Student Loan (GSL) volume, defaults, and percentage of students on financial aid are needed.
  - Development of statistically valid, high-risk profiles to identify institutions that are potentially insolvent or likely to misuse the student aid program. These profiles, based on a random sample of schools, could be used to improve the targeting of program reviews and investigations. Use of high-risk profiles to detect potential financial abuse would be patterned after the approach used in other federal programs that involve financial transactions with many vendors (e.g., Food Stamps, Medicare).
  - -- Collection of new information on factors such as the adequacy of financial arrangements if the school fails, percentage of "ability to benefit" students enrolled, percentage of school revenues derived from federal student aid,



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percentage of school revenues spent on recruitment and other non-instructional functions.

Although limited implementation of these recommendations can begin with existing data, new data requirements and statistically valid indicators could take two or three years to develop and fully put in place.

## A Comprehensive Approach

In addition to improvements in the current set of performance indicators, the student aid system should move toward a more comprehensive assessment of school performance. This approach would use multiple indicators--defaults, financial abuse, and student outcomes--to obtain a more complete picture of institutional quality and performance.

- O A comprehensive assessment of performance should have several objectives:
  - to set minimum standards of eligibility in order to effectively screen out schools that are abusing the programs or providing ineffective education and training to students;
  - -- to create incentive: to improve institutional performance and effectiveness for those schools exceeding minimum eligibility criteria;
  - -- to enhance consumer choice by providing prospective students with useful information about the performance of other students attending an institution; and
  - -- to generate data that policymakers can use to assess performance of the entire system and to gauge improvement.

To date, most of the discussion concerning student aid has focused on the first objective--setting minimum eligibility standards. A comprehensive performance based system must go beyond setting minimum standards to also incorporate these other objectives--creating incentives for program improvement, consumer choice, and system assessment.

- Such a system should include, for proprietary school students, outcomes related to program completion, attainment of appropriate levels of occupational competency, and labor market performance.
  - The student aid programs currently reward schools based on enrollment, and consequently, encourage schools to admit students regardless of whether they are likely to benefit from the training that is provided. Program accountability that is heavily based on student outcomes is consistent with policy directions in the Job Training Partnership Act (JTPA), Vocational Education, and other federal job training programs.
  - -- Program completion, student learning outcomes (e.g., passing state licensure/certification exams, other tests of occupational competency), and labor market outcomes (e.g., training related placements, job retention, wages, employer



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satisfaction) are all important indicators by which proprietary school performance may be measured. A balanced system should include measures in each of these areas.

- 1. Completion rates are a key measure of student attainment.

  Completion rates are important, for studies have shown that students who complete are much more likely to derive economic benefits from their training than those who do not.
- 2. <u>Learning outcomes</u> assess the extent to which students have acquired adequate knowledge and skills to enter and progress in their chosen fields. This outcome is important to ensure that schools have actually trained students, and not simply provided very expensive job placement assistance.
- 3. <u>Labor market outcomes</u> assess the extent to which training programs have achieved their principal objective—to help students obtain jobs. Employment 13 weeks after program completion and weekly earnings are two of the basic performance indicators used in JTPA.
- Assessment of schools on the basis of student outcomes is a long-range undertaking since none of the information required to measure student outcomes is currently available to ED. It is feasible for ED to establish data systems to obtain information on student outcomes, for several states already have elements of such a system in place.
- Special indicators could be developed to gauge how well schools serve populations of particular interest. One set of indicators should compare completion rates, placement rates, and test score results for "ability-to-benefit" students and high school graduates to indicate whether "high risk" students are admitted because they are likely to benefit from their training, or just because of the financial aid they provide. Another set could compare student outcomes for recipients of federal financial aid and unaided students.
- o ED may wish to develop an adjustment methodology that considers student background characteristics when assessing institutional performance regarding defaults and student outcomes. To ensure that lower performance expectations for certain groups of students are not created, performance standards should be established that require schools to substantially exceed--not just meet-adjusted performance levels for high risk students. This approach would result in realistically attainable standards while providing incentives for program improvement.
  - Experience suggests that performance indicators may create unfair comparisons among schools serving different types of students, or may encourage creaming (the enrollment of students who are least likely to default or easiest to place in jobs).
  - -- Setting standards requires data on patterns of prior institutional performance; such data are not currently available to ED.



#### Next Steps

Development of a fully operational performance based accountability system will take several years. Some indicators of student performance may be phased in sooner than others. In the meantime, ED must do more with currently available data on defaults and financial abuse, and develop enhanced measures in both of these areas.

- o In the short run, ED can develop multidimensional default rate indicators.
  - -- These rely entirely on existing data and can therefore be quickly implemented.
  - These indicators could be combined in a composite default index.
- Although ED can do much to improve its use of existing data to identify financial risks and potential abuse, full implementation of recommendations to improve the timeliness of data on schools' financial performance, expansion of the range of financial indicators, and development of "risk profiles" to target investigations will take several years.
  - High risk profiles can be developed with existing data, but more comprehensive and timely data will enhance their validity and effectiveness. The establishment of improved data systems will take several years.
- Indicators of student performance can be phased in as data becomes available. The Student Right to Know Act requires schools to report completion rates beginning in 1993, and ED is conducting feasibility studies to determine whether job placement and pass rates on state licensing exams can be obtained as well. Much additional work will be required to define outcomes, develop measures, specify standards, establish data collection systems, and ensure the accuracy of information collected. To help achieve these long-term goals, ED should:
  - Establish an external "performance indicators panel" of educators and technical experts to advise ED on the appropriateness of alternative indicators, measures and standards; the use of adjustment methodologies in assessing institutional performance; the feasibility of implementing data collection activities; and coordination with other accountability systems at the state or federal level.
  - Sponsor a limited number of demonstration projects with states and accreditation agencies to test the feasibility and effectiveness of different approaches. Implementation of performance-based policies in student aid will require, in most cases, that ED devise appropriate roles for states and for accreditation agencies.
  - Create a joint initiative that includes the Department of Labor and the Department of Health and Human Services to address common issues encountered in performance based policies for vocational and job training programs. Such an initiative could design better ways to measure occupational competencies; establish procedures for using state wage records to determine whether program completers



are employed; and develop objective criteria for deciding when a job placement is "training related."

- To develop a performance measure that separates school performance from student characteristics, an option is to adjust gross performance measures on the basis of student background characteristics. This approach would compare performance at schools serving similar populations, and hold schools accountable where performance fell below a level predicted on the basis of student characteristics.
  - Some of the data needed to begin developing such models are available or can be obtained; better data will be available in two years. Student background characteristics that may be considered include family income, percentage of "ability to benefit" students, and if available, a measure of entry level academic preparation. Other factors to consider are local labor market conditions and average entry wages in the field of training.
  - Recognizing that the use of an adjustment methodology in student aid might be controversial, a performance indicators panel (described above) could be asked to examine the issue. The panel could begin by examining how well adjustment methods have worked in other programs and the extent to which promising methodologies developed in JTPA, in state education agencies, and in health care delivery could be applied to student aid.



# Beyond Defaults: Indicators for Assessing Proprietary School Quality

#### Introduction

To assess the effectiveness of proprietary schools that participate in the federal student aid program, the U.S. Department of Education now relies primarily on student loan default rates, along with some additional information about financial and administrative capability and state licensing and These arrangements have been accreditation agency reviews. widely criticized because they have not excluded abusive or ineffective institutions; moreover, they contain no incentives for schools to improve program performance. This study was undertaken to consider alternatives to relying primarily on student loan default rates as an indicator of school performance. Although the approaches discussed here could also apply to other types of postsecondary institutions, this report is limited to proprietary schools--where the most serious questions about participation in student aid and institutional performance have been raised.

#### Proprietary Schools

Proprietary schools are for-profit organizations that generally provide short term occupational training. There are about 6,000 proprietary schools in the United States, two-thirds of which are separately accredited main campuses; the remainder

<sup>1.</sup> For a detailed discussion of proprietary institutions and students, see Richard Apling, "Proprietary Schools: A Description of Institutions and Students" (Washington, DC: Congressional Research Service, 90-428 EPW) 1990.



are branch campuses. About 5,000 proprietary schools participate in the federal student aid program. Proprietary schools represent more than 60 percent of all institutions currently certified for student aid.

Most proprietary school training is concentrated in office occupations (word processing, secretarial work, bookkeeping), cosmetology (hairdressing, barbering), and technology training (computer science, data processing, electronics). According to the Congressional Research Service, 64 percent of all proprietary schools offer training in cosmetology, business, and marketing.

Proprietary schools are of special concern in the context of federal student aid policy for several reasons:<sup>2</sup>

- o They depend heavily on federal student aid: 81 percent of their students received federal student aid in 1986, compared with about 35 percent for all undergraduate students;
- o The cost to the federal government of providing such aid is high: the average amount of federal aid received by proprietary school students in 1986 was \$3,400, compared with \$2,100 for students at similar public vocational institutions, \$1,700 for aided students attending community colleges, and \$2,666 for undergraduates, in general;
- o Proprietary school students frequently finance their training with loans: 67 percent of proprietary school students received Stafford Loans in 1986, compared with about 20 percent among all undergraduates;



<sup>2.</sup> The information in the following four bullets is from the same source: John Tuma, Antoinette Gifford, and Susan Choy, "Student F: nancial Aid and Postsecondary Vocational Education," prepared for the National Assessment of Vocational Education, (USED, Washington, DC, MPR Associates, 1989).

- o Proprietary schools serve a substantially less affluent population (58 percent of proprietary school students had incomes under \$23,000 in 1986, compared with 36 percent of all undergraduates); and
- o Students attending proprietary schools have a higher propensity to default (27 percent for the 1988 student cohort) on federally guaranteed loans, compared with 17 percent for all students.<sup>3</sup>

High defaults have been regarded as one symptom of a more general problem with institutional quality and effectiveness; hence, in recent years reducing default rates has been the object of substantial effort by the Department of Education and Congress. The most recent attempt to reduce defaults curtails eligibility for federal student aid among schools with default rates exceeding 35 percent in three consecutive years. This requirement became effective on August 15, 1991. Most of the institutions affected are proprietary schools.

### Performance Based Systems

Although performance based systems cover a wide array of different policy options, all share three features: (1) a central role for measures or indicators of how well or poorly the suppliers of education and training perform; (2) standards that establish an expected level of acceptable performance; and (3) a "feedback" mechanism through which information on past performance is used to make future performance better and suppliers are held accountable for their performance.



<sup>3.</sup> ED analysis of GSL records in official "tape dump."

The basic premise underlying performance-based policy is that information on the performance of institutions, suitably tied to rewards, sanctions, funding, and dissemination, can improve a federal program in two ways: through the reallocation of federal resources away from ineffective suppliers and toward more effective ones, and through the efforts of individual schools and students to improve.

Performance-based policies will take several years to design and implement fully. Multiple goals must be sorted out and ranked by priority. Some indicators are easily measured with available data, whereas others will require the development of new measures and data collection systems. Although ultimately a system that employs multiple measures and serves several objectives is highly preferable, creating such a system may not be possible in the short run.

This report describes the choices to be made among alternative goals and indicators that could constitute a performance-based system for federal student aid. Some strategies discussed in this paper are based on the experiences of the Job Training Partnership Act (JTPA) and other employment and training programs. Others are based on the efforts of states to introduce performance indicators into their educational systems, and the use of indicators in other federal programs to detect potential financial abuse and error.

In preparing this report, ED staff have met with representatives of the proprietary school community to discuss their views on the types of indicators that are most appropriate for these institutions. (Appendix A summarizes the discussion that occurred at meetings with representatives from three occupational fields—cosmetology, electronics, and secretarial work). In addition, ED held several informal meetings with representatives from the various proprietary school associations and accreditation agencies.

The performance indicators considered here are those deemed appropriate for proprietary schools that aim principally to provide occupational training. Although the approaches discussed here may be applicable to other types of institutions, (e.g., public institutions that offer occupational training similar to that found in proprietary schools) the merits of applying them more widely are not addressed here.<sup>4</sup>

Finally, this report makes two basic assumptions about future policy. First, despite some recent proposals to curtail eligibility of proprietary schools for student aid, this report assumes that these schools will remain eligible for student aid.

<sup>4.</sup> The limitation to proprietary schools considerably simplified our task. Although most of the performance indicators that make sense for these schools also could apply to public sector institutions, the difficulty lies in the detail of measurement. Because community colleges offer academic as well as occupational programs of study, efforts to assess labor market or learning outcomes depend on proper classification of students as engaged in "occupational training" or "academic/transfer programs." Similarly, students may enroll to earn a degree or certificate, but significant numbers do not seek degrees. Any "completion rate" measure must take account of the differences in student objectives. These are not significant issues in the proprietary sector.

Second, although the Department of Education has only recently undertaken a major effort to overhaul the management structure that administers student aid, it is assumed that the options outlined in this paper will be compatible with, and could constitute a component of, any plausible future management approach.

# Alternative Objectives of Performance Indicators

An indicator measures a student, institution, group of institutions, or the entire system along dimensions considered significant for judging performance. Because most performance consists of complex behavior, indicator systems are usually made up of several measures that tap different dimensions of performance.

Indicator systems may be set up to achieve several different objectives. Although these objectives are not mutually exclusive, specific design characteristics of an indicator system depend heavily on the most important objectives. Indicator systems may be established for several purposes:

To set minimum eligibility standards. In systems that set minimum standards, schools falling below a specified standard may be subject to a loss of funding or additional oversight requirements. The exclusion from student aid of schools with defaults exceeding 35 percent is an example of how indicators may be used to set minimum standards. There are relatively few examples in public policy where performance measures are used to apply severe sanctions such as those planned for student aid; Florida requires a 70 percent job placement rate in its public vocational programs as a condition of

state funding, but it is not clear that programs have actually been "defunded."

To improve institutional performance. Performance indicators may encourage individual institutions to improve their performance. Through information disseminated to policymakers, schools, and licensing and accrediting organizations, institutions may be encouraged to make changes in curriculum, teaching, student counseling, and job placement. Indicators may also be tied to the distribution of rewards. Institutions that score high on measures of performance or exceed a specified standard receive more funds, and those that score low or fall below a standard may have their funding reduced. Examples of the use of financial rewards are JTPA's 7 percent performance incentive funds and Tennessee's 5 percent performance funding for higher education. Financial incentives usually involve marginal shifts in funding. Rewards may also take the form of regulatory relief; that is, schools that substantially exceed a standard are subject to less burdensome audit, review, and monitoring requirements.

Systems designed to improve performance focus on change over time, not just on the measure of performance during one time period. Measures that gauge change over time are particularly important for assessing improvement.

- To improve program monitoring. Experience suggests that some types of indicators are highly correlated with forms of institutional behavior that violate federal policy. For example, indicators are typically employed in federal programs to identify high-risk vendors or individuals most likely to engage in financial abuse. Such sources may then be targeted for in-depth program review. Indicators do not constitute evidence of abuse per se, but simply improve the targeting of investigations and, ultimately, sanctions that are imposed.
- To produce consumer information. Dissemination of information to students, parents, and employers can have a powerful effect on the demand for high-quality training. Armed with information on completions, job placements, and earnings, students can shift their enrollment toward suppliers with superior performance. Because "money follows the students"—that is, revenues from student aid and tuition are directly linked to enrollment—there could be a strong incentive for programs to raise performance. In contrast to systems that measure improvement through "value added" and "change over time" indicators, consumer information systems rely more heavily on measures of gross

performance during a recent time period. Thus a prospective student cares little about whether a school's job placement rate is improving or getting worse, but only whether the student is likely to get a job related to the training received.

o <u>System assessment</u>. Although the primary purpose of most indicator systems is to assess the performance of subnational components--programs, institutions, or states-the information may be aggregated to assess the performance of the entire system and to assess change over time. Such information can be important to federal program managers. Of course, aggregation to the national level requires comparability of data across occupational fields, types of institutions, and states.

# Accounting for Student Characteristics: Adjusting Outcomes

Holding institutions accountable for the performance of their students could result in institutions serving those students with the greatest potential to succeed, and not serving higher risk students who are most in need. Adjusting expected outcomes for the characteristics of the students would reduce the likelihood of creaming; that is enrolling students who are least likely to default on loans or are easiest to place in jobs. On the other hand, adjusting for performance outcomes could institutionalize lower performance expectations for certain groups of students, and reduce the incentive for schools to recruit students wisely—that is, to select students who are most likely to benefit from the training received.

Other federal programs have recognized the importance of addressing the potential for creaming--notably JTPA and Vocational Education. JTPA has developed a regression model that adjusts performance scores to consider multiple student

characteristics and local labor market conditions. The recently reauthorized Carl Perkins Vocational and Applied Technology Act requires states to develop standards and measures of performance for secondary and postsecondary vocational education. Congress specified that such systems contain "incentives or adjustments that are designed to encourage service to targeted groups or special populations" (P.L. 101-392. Sec. 115).

Two basic approaches exist to adjust for the characteristics of students:

on students. In this case, performance measures would be adjusted for participants' skills, knowledge, and experience before entering the program and would hold institutions accountable for improvement. This approach would determine net impact by comparing expected performance for a student in the absence of the program to actual outcomes after leaving school. Statistical techniques to predict expected performance would provide net impact estimates.

This approach requires data on program participants and non-participants that could be periodically collected for a sample of institutions. "Net impact" could be measured through an evaluation conducted on a sample of institutions, but it is not feasible to implement this



approach through the use of regularly collected institutional records.

o Another approach is to predict performance (e.g. defaults, job placements, etc.) for institutions based on the characteristics of their student body and then hold institutions accountable for doing better than other institutions serving similar types of students. This approach measures the "relative effectiveness" of one institution compared to others.

This approach would build existing levels of performance into the base and therefore, could institutionalize poor performance. To avoid this, performance standards should be set at levels that require schools to <u>substantially exceed</u> the performance level predicted on the basis of student body characteristics. Setting standards at a level that requires schools to exceed substantially the performance level predicted on the basis of student characteristics will result in demanding, but realistically attainable, expectations. This approach can be a powerful tool for program improvement. There are several ways in which this approach could be implemented:

-- Comparisons among schools serving similar populations of students. Schools could be rank ordered on an index that measures socioeconomic status, and school performance could be compared among similarly ranked institutions. Several states (Kentucky, California, and South Carolina) employ this approach in assessing



reading and math achievement scores of elementary and secondary students.<sup>5</sup>

- Statistical adjustment models that predict performance based on student characteristics. adjustment model is based upon the previous experience of participants in the program. considers multiple student characteristics and local labor market conditions.6 In the context of student aid, this approach would compare a predicted level of school performance (e.g., defaults, placements, etc.) to the actual level of performance. Performance outcomes at a school would be predicted on the basis of as many relevant characteristics as available data will permit (e.g., family income, percentage of nonhigh school graduates/"ability to benefit" (ATB) The difference between students, academic ability). the predicted performance and the actual level may be Schools could be penalized attributed to the school. for poor performance or rewarded for performance substantially above the predicted level.
- -- Measures of "value added" that compare performance before the program to performance after the program. This approach would measure change in performance during the time that students were enrolled; comparing institutions would provide a measure of relative institutional effectiveness. This approach is appropriate where it makes sense to develop preand post-measures of performance, e.g., gains in basic skills or occupational knowledge. It would be potentially misleading to rely exclusively on this approach, however, because: a) measures of preprogram employment and wages are inappropriate if students were not previously in the labor market seeking employment (e.g. recent high school graduates, housewives); and b) measurement of postprogram improvement is only feasible for students who complete the program, but not for those who withdraw early.



<sup>5.</sup> Joseph Wholey, "Using Evaluation to Improve Program Performance," University of Southern California, Washington Public Affairs Center, forthcoming.

<sup>6.</sup> The JTPA adjustment model considers such barriers to employment as school dropout incidence, limited English language proficiency, handicapped incidence, offender status, reading skills below the seventh grade level, long-term AFDC receipt, lack of a significant work history, homelessness, substance abuse, teen pregnancy/parenthood, or JOBS program participation.

The data and systems needed to adjust for all relevant student characteristics do not currently exist, but they could be developed. In developing an approach to reduce creaming while also holding institutions accountable for improved performance, the second approach—the one emphasizing relative impact of institutions, is the one that is most feasible to implement using regularly collected program records.

#### Alternative Indicators of Performance

Four broad types of indicators appear relevant to proprietary schools: (1) default rates; (2) other indicators of financial and administrative abuse or instability; (3) indicators of program inputs and process; and (4) indicators of program effectiveness or outcomes. The Department of Education now collects information on student defaults and on a limited range of financial and administrative features. State licensing and accreditation agencies determine quality by focusing on program inputs and procedures. The Department does not collect any information with which to assess institutional performance based on student outcomes.

#### Defaults

Defaults reflect the frequency with which student borrowers under the Guaranteed Student Loan (GSL) program do not repay their loans on time. School default rates are based entirely on the proportion of borrowers in default. ED makes no adjustment



to account for students who repay late, for institutional differences in dependence on federal loans, or for student characteristics.

Schools that have high default rates have been associated with several problems of legitimate concern to policymakers: financial abuse, organizational instability, administrative impairment, and programs of poor educational quality. All these concerns were recently documented by the Nunn Committee investigation of federal student aid programs. The committee found "overwhelming evidence that the GSLP (Guaranteed Student Loan Program), particularly as it relates to proprietary schools, is riddled with fraud, waste, and abuse, and is plagued by substantial mismanagement and incompetence. Hundreds of thousands of students have been left with little or no training, no jobs, and significant debts that they cannot possibly repay (emphasis added)."7 Moreover, the cost to the federal government of defaults has risen so rapidly that it now exceeds 50 percent of total annual federal costs for the GSL program. The default rate indicator is attractive to program administrators because it can be readily calculated from existing Because no additional information is required, the likelihood of swift action to remove high-default schools from the federal student aid program is increased.



<sup>7.</sup> U.S. Senate, "Abuses in Federal Student Aid Programs," Report of the Committee on Governmental Affairs, Permanent Subcommittee on Investigations, (Washington, DC: US Government Printing Office, 1991) p. 6.

But use of student default rates as the primary measure of an institution's performance may be problematic for several reasons:

o Default rates may be less directly and consistently associated with poor program quality or financial abuse than is frequently alleged. According the Congressional Research Service:

"Concerns over proprietary school participation in Title IV programs are rooted in two major problems: apparent profiteering from Title IV by some unknown number of schools through fraudulent and abusive practices; and high GSL default rates by proprietary school students. There is debate over the extent to which these problems may be interrelated—that is, that school abusive practices are causing high defaults—but there is general agreement that they exist and should be addressed to assure the future viability of title IV programs."

Preliminary results that compare default rates with independently collected employer ratings of program quality suggest a weak correlation. According to data collected for the National Assessment of Vocational Education (NAVE), which contain employer ratings for 28 proprietary school programs in three different cities, default rates for the lowest-rated institutions (18.5 percent) were essentially the same as those for mid rank (12.8 percent) and highly rated institutions (18.1 percent).

Another study compared high default institutions with a different measure of program quality--approval by the Veterans Administration for GI educational benefits. Of the 84 high default institutions considered, 50 percent were approved by the VA, 20 percent had their approval withdrawn, and the remainder never participated in VA programs. 10

o School default rates do not separate school-related factors from other important factors that are also associated with defaults. In addition to the type of institution attended, default rates are strongly associated with student



<sup>8.</sup> Charlotte J. Fraas, "Proprietary Schools and Student Financial Aid Programs: Background and Policy Issues" (Washington, DC: 90.427 EPW, Congressional Research Service, 1990), p. 19.

<sup>9.</sup> These findings should be regarded as simply suggestive because of several limitations in the data. (1) the sample is small; (2) employer ratings applied to individual programs—not to the entire institution; and (3) the sample is limited to programs in accounting and manufacturing, rather than including fields with the highest default rates.

<sup>10.</sup> Valentina Tikoff, "Screening Schools: How the Departments of Education and Veterans Affairs Approve Institutions for Participation in Student Assistance Programs," US ED, Planning and Evaluation Service, 1991.

background characteristics, and with postschool earnings (which, in part, reflect the field of study). Research on the factors associated with loan defaults indicates that race, family income, and low wages (relative to other postsecondary students) are strong predictors of student defaults. <sup>11</sup> A recent review of default rate studies by the General Accounting Office identified the following factors, in addition to attending a vocational/trade school, associated with defaults: low income, little financial support, minority background, lack of a high school diploma, failure to complete educational program, enrollment for less than one year, small amount borrowed, and unemployed when defaulting. <sup>12</sup>

The use of absolute default rates as a condition of eligibility for student aid could therefore penalize those schools that enroll students with a higher propensity to default: minorities, economically disadvantaged students, and students whose training is in low-wage fields.

Another factor that could also affect a school's default rate is the quality of loan servicing. A high-default school, for example, could have loans that, but for poor servicing, might not have entered default.

- The definition ED uses to measure default rates may not fully reflect the extent of the problem. The Department's definition does not consider whether repayment has occurred after a student enters default, the number of borrowers at an institution (high defaults based on few loans is clearly of greater concern than high defaults based on many borrowers), the proportion of dollars borrowed that are in default, and the percentage of students enrolled who borrow (schools where everyone borrows might be asked to incur special obligations compared with schools where a fraction of the students obtain federally guaranteed loans).
- o Default rates are currently based on the percentage of loans that ever enter default, but many loans, although



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<sup>11.</sup> Mark Dynarski, "Analysis of the Effect of School Type and Post-School Earnings on Default," prepared for U.S. Department of Education, Planning and Evaluation Service, by Mathematica Policy Research, forthcoming. See also Laura Knapp and Terry Seaks, "An Analysis of the Probability of Default on Federally Guaranteed Student Loans" (Washington, DC: College Board, 1990). Although Dynarski found that the type of institution attended (proprietary schools and community colleges) also affects the propensity to default, no carefully controlled studies have established the relationship between defaults and the specific Institution attended. Knapp and Seaks's study found no relationship between type of institution and default. Their study did not include proprietary schools.

<sup>12.</sup> General Accounting Office, "Student Loans: Characteristics of Defaulted Borrowers in the Stafford Student Loan Program," GAO/HRD-91-82BR, 1991.

initially in default, are subsequently repaid. One study estimated that approximately 30 percent of defaulted loans enter repayment within 20 months after default, and most loans that enter repayment do so within the first few months after default. This study estimated that 40 to 45 percent of defaulted loans would enter repayment within 36 months. Such loans are treated as in default, however, when ED calculates default rates. This practice produces a "worst case" estimate of defaults that may overstate the extent of the problem.

Supplemental Measures of Defaults. The use of multiple measures or indicators of performance provides a more complete picture than does reliance on a single indicator. Current practice focuses on only one dimension of the problem: the frequency of defaults. This approach does not distinguish between schools with few borrowers and those with many borrowers, and schools whose students borrow small amounts and schools where the loans are more substantial, schools in which most students have Stafford Loans and schools where loans are not a significant source of institutional finance. Use of several dimensions—frequency of defaults, proportion of dollars in default, and percentage of students who borrow would provide a more complete picture of the default rate problem at individual schools than any single dimension does.

Creation of a <u>composite default index</u> using all of the above mentioned measures--frequency of default, proportions of dollars



<sup>13.</sup> American Management Systems, "Stafford Student Loan Program Pilot Debt Collection Study," prepared for U.S. ED, 1990.

in default, and percentage of borrowers—is one option by which multiple dimensions of the default problem can be considered. Combining such measures and weighting them as appropriate could produce a school's default index. Standards of school eligibility for student aid could be established in accordance with an institution's default index score.

The development of a composite default index could be undertaken in a relatively short period of time--possibly six months. All the information needed is available or can be calculated from existing data (see table 1).

The second major problem with the use of a gross default rate is that it is not sensitive to factors that have a powerful independent effect on defaults, such as the socioeconomic background of the students served. One way in which gross default rates may be made a more useful indicator of school performance is to employ a statistical model to adjust default rates based upon the characteristics of the students that borrow. Such an approach would compare the gap between actual defaults at a school and a level predicted on the basis of student characteristics.

Data availability is one obstacle to immediate implementation of an adjustment model approach (see Table 1). Ideally, it would be helpful to have information for all proprietary schools on a



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Table 1

Default Rate Indicators

<u>Measures</u>	<u>Data Needs</u>	<u>Availability</u> <u>of Data</u>	<u>Use</u>
School default rate	Borrower default rate	Yes	Currently used to establish minimum eligibility requirements.
Composite default index	Borrower default rate Dollar default rate Percent of students who borrow	Yes Yes Yes <u>1</u> /	Not used
<u>Adjusted defaults</u>	Borrower default rate Family income Ability to benefit Expected wages Academic Ability	Yes Yes No <u>2</u> / Yes <u>3</u> / No	Not used

<sup>1/</sup> Information on percentage of students who borrow may be derived using enrollment data in IPEDS.

<sup>2/</sup> Information on the percentage of non-high school graduates enrolled (not the percentage of non-high school graduates receiving federal student aid) appears in the application for institutional eligibility and certification. This information is not routinely updated.

<sup>3/</sup> Available from Department of Labor.

wide range of student characteristics: family income, high school graduation status, dependency status during repayment, expected earnings for the field of study, and entry-level test scores. Unfortunately, the main source of program records, the GSL tape dump, contains only data on income and dependency status before borrowing. To implement this approach fully would require augmenting data on the GSL tape dump--a process that could take up to several years.

In the interim, a more limited model of predicted defaults could be developed using existing data on the GSL tape dump (primarily family income and dependency status) merged with data published by the Bureau of Labor Statistics on entry level wages for different occupations.

Another short-term option is to compensate for the data limitations of program records by estimating defaults using existing data sets that contain more complete information on student characteristics. Two possibilities are: the National Postsecondary Student Aid/Student Loan Recipient Survey and various state data bases. Values derived from these data sets could then be applied to individual schools using student record data that schools would be required to provide or data that is available elsewhere (e.g., Integrated Postsecondary Education Data System--IPEDS). Longitudinal data from the National Postsecondary Student Aid Survey of Beginning Postsecondary



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Students will be available in 1993; this could be merged with the GSL tape dump to develop an adjustment model predicting defaults. The data could also be used to estimate other student outcomes for students enrolled in short term programs.

# Indicators of Financial Abuse and Program Stability

If nothing else, student aid is a large financial network in which substantial amounts of money move between the government, students, service providers, banks, and other intermediaries. Such systems contain ample opportunity for abuse by anyone out to make profits at the expense of students and the taxpayer. High default rates may be one indicator of financial abuse. Financial fraud and errors may take many other forms as well—for example, unethical recruiting practices, failure to implement tuition refund practices, failure to notify lenders of changes in registration status, and complicity in submission of inaccurate aid applications, etc.

Defaults and financial abuse may or may not be related to one another. Eliminating high default schools from Title IV may not adequately address concerns about financial abuse. Constant monitoring to detect and deter fraudulent and abusive behavior is mandatory.

A closely related concern is program stability. Marginal institutions that go out of business leave their students with



serious financial and educational problems. Students are left to repay loans for education and training that was never provided. Students who default on these loans are barred from future borrowing to finance subsequent education, and of course taxpayers must assume any defaulted debt. There are no systematic data on the extent to which students are left to repay loans incurred at institutions that "folded"; this problem should be investigated further.

Another aspect of this problem involves "branching." The Congressional Research Service estimates that one-third of all proprietary schools are branch campuses. When institutions expand rapidly by setting up branches in distant parts of the country often in totally different occupational fields the ability to administer the main campus effectively as well as remote branches is stretched thin. Of particular concern is the ability of a school to administer the student aid program, where the rules are both numerous and frequently changing. Serious deficiencies among branch campuses may be obscured because (1) separate accreditation of branch campuses is not required if the main campus is already accredited; and (2) default rates and other performance measures may reflect scores averaged across branch and main campuses.

The federal government has a special responsibility to make sure that schools participating in the student aid program do not



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engage in financial abuse and do not go out of business leaving indebted students without an education. ED is responsible for ensuring that schools meet minimal financial standards and that they manage the substantial federal resources they receive appropriately.

The establishment of strict financial standards is appropriate where the objectives of a performance-based system are to set minimum standards for eligibility, to target program monitoring to concentrate on high-risk institutions, and to protect consumers from abuse.

Current Practice. ED employs financial and administrative criteria when initially certifying schools to participate in student aid, although serious questions have been raised about the rigor with which existing requirements are enforced. The financial criteria on which the Department relies is essentially a measure of net worth. Companies must demonstrate a positive net worth on a financial statement. Schools are required to submit additional financial statements every two years. These statements focus exclusively on the expenditure of student aid funds. Schools that are considered financially deficient, may be required to post a surety bond. Various proposals have been made to require more frequent financial data and to increase data



<sup>14.</sup> U.S. Senate, "Abuses in Federal Student Aid Programs," pp. 24-28.

reliability by requiring audits by a Certified Public Accountant (CPA) or independent certification of the results.

The problems associated with financial certification have been extensively reviewed by others. Among the limitations cited are the following:

- o Little is done to evaluate the financial information provided;
- o Required reports are frequently submitted late or not at all:
- o There are no requirements for recertification, with the exception of schools that change owners;
- o Surety bonds are insufficient to protect students and to compensate the federal government for losses;
- o Program reviews fail to detect financially troubled institutions; and
- o There is no mechanism to verify independently the information provided by applicants seeking certification.

Administrative capability also is considered in certifying schools for student aid. Two indicators that ED established to indicate administrative capability are (1) student withdrawal rates in excess of 33 percent; and (2) adequacy of staffing to administer student aid. With respect to withdrawal rate, the Inspector General found that "institutions are not denied certification no matter how far they exceed these tolerance levels." Other "administrative capability requirements" (e.g.,



<sup>15.</sup> See Margot Schenet, "Proprietary Schools: The Regulatory Structure" Congressional Research Service, (Washington, DC: 90.4240 EPW, 1990); Charles Brennan, "Issues Noted to Date in Our Audits of the Postsecondary Accreditation, and Institutional Eligibility and Certification Processes," (Washington, DC: U.S. Inspector General, 1990).

acknowledgment of having received and understood the student aid rules) are largely paperwork. 16

ED also employs several fiscal indicators, plus other information, in deciding whether a school's program should be reviewed. These indicators are: the school has a default rate between 30 and 40 percent<sup>17</sup>, the school has large audit liabilities or overdue audit reports, there has been no program review within four years, the school is new, the school belongs to a chain with multistate locations, the school is being monitored for financial capability, and the volume of GSL and Pell grants has increased.

One major problem with the indicators currently used to identify financially risky institutions is the inadequacy of the available data. ED's data base theoretically contains data on most pertinent factors associated with financial risk, but the data are often incomplete or out of date. Data on GSL and Pell volume are at least 18 months old before they enter the Department's data base; substantial losses may occur before any data with which to detect potential abuse become available. There are no data on the percentage of students who fit the



<sup>16.</sup> In addition to establishing the financial and administrative criteria used in determining initial eligibility for student aid, ED determines whether a school has received a state license to operate and is accredited by a recognized accrediting agency. Studies by the Inspector General and the Congressional Research Service have suggested that state licensing and accreditation practices are often superficial.

<sup>17.</sup> Schools with default rates exceeding 40 parcent are to be reviewed by guarantee agencies.

category of having the "ability to benefit" or the percentage of revenue spent on instruction versus recruiting. Other key data (branching, net worth, percentage of students on federal financial aid, bonding, arrangements in event of school failure) are not regularly updated.

Another significant problem is that the financial indicators employed have not been scientifically validated through an independent random sample of institutions. ED identifies risk factors and assigns weights to those factors entirely on the basis of staff experience. In the absence of an analysis of financial abuse factors based on a random sample, there is no way to determine whether program reviews are being optimally targeted, or whether a different configuration of factors and weights would identify other high-risk schools.

Alternative Indicator Systems to Identify Financial Stability and Student Aid Abuse. Although studies have documented a problem of lax or inconsistent enforcement of existing rules and procedures and much more could probably be done with the financial and administrative information currently available, several additional financial risk factors could be employed (see Table 2) in decisions about recertification or program reviews:

o Percentage of students receiving federal financial aid;



<sup>18.</sup> U.S. Inspector General, "Financial Analysis Certification Process Not Adequate to Protect Students and Government," Audit Control Number 11-80160, 1989.

Table 2
Financial Risk Indicators
Availability

<u>Measures</u>	<u>Data Needs</u>	of Data	<u>Use</u>
Financial solvency	Net worth Adequacy of bonding	Yes Yes	Currently used for certification and recertification
	Financial protection for students against insolvency	No	
Potential abuse of student aid	Percentage of students or federal financial aid	n Yes	Not used
<u> </u>	Large increases in volume of GSLs and Pell grants	Yes	Program reviews
	Large increases in defaults	Yes	Not used
	High default rate	Yes	Eligibility, program reviews
	Change in school ownership	Yes	Not used
	Extensive branching	Yes	Program reviews
	Adequacy of fin acial arrangement for student if school fails	No	Not used
	Changes in tuition consistent with maximum available student aid	Yes	Not used
	Percentage of abililty- to-benefit students	No	Not used
	Percentage of revenues derived from federal aid	No	Not used
37	Percentage of revenues spent on instruction and recruitment	No	Not used



- o Percentage of a school's revenues derived from financial aid;
- o Percentage of revenues spent on recruiting and on instruction;
- o Significant increases in defaults;
- o Changes in school ownership;
- o Adequacy of financial arrangements to protect students in the event of school failure; and
- O Changes in the relationship between price charged and maximum available aid.

With large sums of money, many vendors, and complex transactions to consider, the task of reviewing all financial records to identify financial abuse considerably exceeds current This problem is common to other large federal capabilities. programs that use many service suppliers. Food Stamps, Medicare, the Supplemental Feeding Program for Women, Infants and Children (WIC), and the Internal Revenue Service have faced similar needs for systems to monitor and detect potential error or financial They have developed high risk profiles to identify abuse. sources of potential abuse. Applied to ED, such systems would simplify the review of wide-ranging financial data, identify the schools where the risk of abuse is greatest, reduce the time before potential abuse is identified, and target the Department's very limited investigatory capabilities on these institutions.



All the federal programs just mentioned have developed "risk profiles" to identity the greatest sources of potential abuse. Their systems employ statistically validated "risk factors" to predict financial error and abuse. A similar system could be developed for student aid using many of the indicators noted earlier to detect potential financial abuse. A parallel system could be developed to predict potential proprietary school failures. 20

Risk factors that make up a system to detect error may be identified on two bases:

- o The correlation between potential risk factors and actual abuse in a random sample of institutions. Data from a random sample of proprietary schools do not now exist but could be incorporated in future program reviews.
- Experiential knowledge about the correlates of abuse based on program reviews that the Department has conducted. In the short run, a risk profile based on program experience could be generated, but statistically valid adjustments to such a system will ultimately require data from a random sample of institutions.

Any system to identify potential financial abuse needs an investigatory capability and effective sanctions. Risk indicators are simply correlates of financial abuse, not direct evidence. By themselves, they are inadequate to justify



<sup>19.</sup> ED has developed a computer based risk profile system to identify applications for student aid that are most likely to contain error; such high-risk applicants are then targeted for verification.

<sup>20.</sup> New York State has developed such a system. As of this writing, we have been unable to determine how effective that system has been.

withholding a school's certification for student aid. Financial risk factors permit efficient targeting of investigations and, if the system works well, detection and deterrence of abuse before substantial losses can occur. Currently, ED's ability to investigate high-risk schools effectively and to impose sanctions that stick is highly suspect. Investment in the development of better measures and indicators to detect potential financial abuse should be undertaken only if parallel developments occur in the ability to investigate schools and invoke sanctions.<sup>21</sup>

In summary, although ED currently collects certain types of information pertinent to assessing financial risk, serious questions have been raised about the timeliness, completeness, and use of these data. The Department should collect additional indicators of the sort already described and strive to improve the timeliness of data that it obtains. Financial analysts, accountants, and bankers should be asked to help identify better financial indicators. Better measures and indicators, however, must be accompanied by improved investigations.

## Indicators of Program Inputs

The search for educational quality has led researchers to seek special configurations of resource allocation, faculty characteristics, curriculum, teaching style, organizational



<sup>21.</sup> A discussion of the requirements for a better system of on-site investigation of potential abuse and of credible sanctions is beyond the scope of this report.

climate, and leadership traits that are consistently more effective than other arrangements. This search has led to efforts to identify "effective schools" and to replicate educationally effective practices in additional settings. In recent years, the effective schools reform movement appears to have lost ground as an instrument of educational policy, in favor of an emphasis on accountability based on student outcomes.

The recently completed National Assessment of Vocational Education (NAVE) attempted to identify effective practices in postrecondary vocational education through a study comparing training programs that were highly rated with programs that were less well rated in both the public and private sectors.<sup>22</sup> This study found that five main factors related to high program ratings (by employers):<sup>23</sup>

- 1. Intensity and depth of vocational instruction;
- Integration of theoretical and applied aspects of vocational instruction;
- 3. Frequency of external linkages through advisory panels of employers and customized training programs, as well as other means that keep faculty abreast of developments in their field;
- 4. Quality of the job placement function; and
- 5. Dissemination of "honest" program information.



<sup>22.</sup> Rocco DiPietro, Lou Tornatzky, James Jacobs, and Michael Woods, "Predictors of High Quality Postsecondary Vocational Education," NAVE Contractor Report (Ann Arbor, MI: Industrial Technology Institute, February 1989).

<sup>23.</sup> David Goodwin, Final Report, National Assessment of Vocational Education: <u>Postsecondary Vocational Education</u>, Vol. IV (Washington, D.C.: U.S. Government Printing Office, 1989), pp. 27-36.

The factors identified in the NAVE study were quite general and frequently difficult to measure objectively. Many other factors that were expected, on the basis of educational and organizational theory, to be related to program effectiveness—the quality and quantity of equipment available, faculty educational background, and various attributes of school leaders—were not found to be significant in this study. Although this attempt to identify characteristics of effective vocational training programs produced interesting results, the generally weak findings provide an inappropriate basis for setting policy standards.

Fundamental beliefs about key attributes of program quality are occasionally challenged on the basis of new research findings. A recent Rockefeller Foundation study of minority single mothers found that "by offering in-depth training in occupational skills with strong support services, poor single mothers can quickly increase their earnings and employment rate...Programs that emphasize basic skills education rather than immediate skills training do not improve earnings as quickly."<sup>24</sup> This finding is contrary to the well-established view guiding much federal policy that effective job training programs rest heavily on a foundation of basic skills. Thus, new



<sup>24.</sup> The Rockefeller Foundation, "Into the Working World: Research Findings from the Minority Female Single Parent Program."

approaches to learning rest heavily on teaching skills in an applied context.<sup>25</sup>

Proprietary school accreditation agencies consider a wide range of educational inputs and processer when evaluating a school: curriculum content, student recruitment and admissions policies, instructional staff, space and facilities, instructional materials and methods, and student support services. For example, the Accrediting Commission of AICS (Association of Independent Colleges and Schools) has a standard that requires faculty preparation that is "academically and experientially appropriate to the subject matter taught. Faculty members should be competent to teach the subject matter offered and should have reasonable latitude in their choice of teaching methods". 26

In addition to faculty credentials and instructional procedures, accreditation agencies may require that program content be carefully planned and appropriate to the occupational objective, that student progress be continuously assessed and documented, and that information disclosed to the public not be misleading.



<sup>25.</sup> Secretary's Commission on Achieving Necessary Skills; US Department of Labor, "What Work Requires of Schools: A SCANS Report for America 2000;" June 1991.

<sup>26.</sup> The Accrediting Commission of the Association of Independent Colleges and Schools, "Accreditation Criteria," 1989, p. 47.

Review teams that visit schools consider all of these factors when information is gathered through on-site observation. There are no absolute standards. Assessment and ultimately, recommendations about whether to accredit a school reflect the subjective judgments of team members. This approach differs markedly from the requirement that an indicator system employ quantitative measures that permit valid comparisons across institutions.

State laws and rules governing the licensing of proprietary schools may also focus on a variety of educational inputs including space and facilities, faculty qualifications, and accurate public disclosure of claims to the public. The Nunn Committee reported that licensure requirements vary widely across states, from merely filling out a form for a general business license to undergoing a more thorough evaluation by a state board or agency. In some states, schools are automatically licensed if they have been accredited.<sup>27</sup>

The effective schools movement, findings from the National Assessment of Vocational Education, and state licensing and accreditation agency practices all demonstrate the difficulty of establishing statistically valid predictors of program quality that are based on educational inputs. Although educators generally agree on many aspects of what constitutes program



<sup>27.</sup> U.S. Senate, "Abuses in Federal Student Aid Programs," p. 14.

quality, these notions are based largely on experience and intuition.

Key indicators such as "faculty qualifications,"

"curriculum content," and "adequacy of facilities" are unlikely
ever to be defined with enough precision to permit quantitative
measurement. In this case, it appears best to rely on the
judgment of qualified outside reviewers and to ensure that such
reviews are rigorous, independent, and thorough. Even if
meaningful standards for educational inputs could be established,
however, it is questionable that these factors represent the best
way to measure program quality. Increasingly, educational policy
has focused on school outcomes—what students have learned—as a
measure of program effectiveness, rather than on school
characteristics.

#### Indicators of Program Outcomes

There is a substantial and growing effort to incorporate outcome measurement and performance incentives into most federal education, job training, and social welfare programs. Similar efforts are under way in many states. These efforts rest on the premise that replacing the current focus on rules to monitor



<sup>28.</sup> The establishment of formal federal standards related to program inputs and content, it could also be argued, represents an unwarranted step toward government control over school curriculum.

compliance with procedures in favor of an emphasis on student outcomes will create incentives to improve results for students.

Improving the opportunity for students to acquire labor market skills, obtain jobs, and improve their economic status are the key objectives of any vocational training program. Performance measures oriented toward these outcomes offer an opportunity to hold schools accountable for results that matter most. An effective system of accountability based on educational outcomes could complement, and in some cases replace the current focus on school inputs, defaults, and financial risk.

JTPA's performance standards system has generally been credited with increasing the emphasis on placements and preemployment competencies and with creating a strong sense of accountability for the use of public funds. In JTPA, up to 6 percent of state funds are set aside as an incentive to reward service delivery agencies (SDAs) that perform well. In turn, many SDAs enter performance contracts with organizations that supply training; under these contracts, a share of funds paid is contingent on student outcomes (e.g., 62 percent follow up placement rate). The Job Opportunities and Basic Skills (JOBS) program in the Family Support Act also plans to institute outcome measures to assess performance.



<sup>29.</sup> National Commission for Employment Policy, "JTPA Performance Standards: Effects on Clients, Services, and Costs", 1988.

The recently reauthorized Carl Perkins Vocational and Applied Technology Education Act mandates that states develop systems of performance measurement and standards. The Perkins Act requires that states measure learning and competency gains in academic skills and at least one more of the following: competency attainment, job or work skill attainment, retention in school, and job placement. Under the Perkins Act, states have complete discretion in defining these indicators, specifying measures, and setting standards. There is no requirement that funding or other rewards and sanctions be tied to performance outcomes.

Should student aid move toward performance standards, one key issue is the extent to which federal guidelines, measures, or standards should be employed. Another issue is how to make performance standards and measures for public programs receiving federal Vocational Education Act funds compatible with standards for other vocational education programs, largely proprietary, that are financed with federal student aid funds.

State Practices in Measuring Postsecondary Vocational
Outcomes. A recent Department of Education study examined the
extent to which states collect information from postsecondary



vocational programs on a wide range of student outcomes, 30 with the following findings:

- O Most states collect some information about program outcomes (see Table 3). The most frequently collected outcome measure is the number of students who complete a training program (found in 46 states for public schools and 29 states for proprietary schools). The next most frequently collected measure is the extent to which program completers are placed in jobs (33 states for public schools and 21 states for proprietary schools). Most states attempt to determine whether the job placement is related to the training provided, although this practice is much less common for proprietary schools than it is for public schools. A few states collect information on outcomes such as earnings, gains in basic skills and job knowledge, and results from state licensing exams.
- o Most states that measure completions have developed standardized definitions of who is a "program completer" (39 of 46 states in the public sector and 26 of 29 states for proprietary schools). In most cases, completers are defined as recipients of formal degrees. One critical limitation to the definition of program completer used for public institutions is that information is callected only for recipients of associate degrees.

Table 3
Number of States Collecting Student
Outcome Information on Postsecondary Vocational Programs
Spring 1990

	From	From	
Outcome Measure	Community College	Proprietary Schools	
Completion	46	29	
Placements	33	21	
Earnings	21	3	
Gains in basic skills	13	0	
Licensure	12	2	

Source: Research and Evaluation Associates, "State-Level Measurement of Postsecondary Vocational Education" (Washington, D.C. 1991).



<sup>30. &</sup>quot;State-Level Measurement of Performance Outcomes in Postsecondary Vocational Education, Vol. I, Executive Summary and Overview of State Policies," prepared for U.S. ED by Research and Evaluation Associates, Washington, D.C., 1991.

- o The most common source of information about job placement is surveys of former students; the second most popular method is surveys of employers.
- o Few states attempt to verify the accuracy of data reported by schools.
- o No state measures program outcomes the same way for students in public postsecondary programs and for those in proprietary school programs. This difference reflects the division of responsibility for postsecondary vocational training among a variety of state agencies, including those responsible for community colleges, public vocational technical institutes, and multiple licensing boards for different occupational areas.

Alternative Measures. In the context of student aid, the three types of student outcomes that are most relevant are labor market outcomes, learning outcomes, and program completion outcomes.

- o <u>Labor market outcomes</u> include the rates at which students are placed in jobs, the job retention rate, the extent to which job placements are in a field "related to the training," the level of earnings at job entry and selected times thereafter, and employer satisfaction with the school's graduates.
- O <u>Learning outcomes</u> include the rates at which students demonstrate occupational knowledge and competency by passing state licensing/certification exams and by achieving certain scores on occupational competency exams. Learning outcomes may also include measures of academic skills, growth in academic skills (as required by the Perkins Act), and measures of student satisfaction.
- o <u>Program completion outcomes</u> include dropout and completion rates, rates at which students obtain more advanced training (on the job or in school), the ratio between completion rates for student aid recipients and other students, and the ratio between completion rates for ATB students and non-ATB students.



Each of these types of performance outcomes--labor market, learning, and program completion--is discussed in the sections that follow.

Labor Market Outcomes. Given that the principal purpose of occupational training in proprietary schools is to prepare students for jobs, labor market indicators must play an important role in assessing program performance. In JTPA, employment and weekly earnings at follow-up 13 weeks after program completion are two of the basic indicators by which client outcomes are measured. These are indicators of job retention and earnings growth. In the past, JTPA performance indicators placed more emphasis on initial job entry.

Tennessee uses job-related placement as one of the outcome measures to assess its two-year public colleges. The placement rate is calculated as the ratio of students placed in fields related to their training to the total number of program graduates--minus those serving in the military or pursuing further education. Institutions are required to survey their graduates and to maintain auditable records. The state maintains a list of occupations that it deems to be related to the program of study. Florida requires that public schools attain a 70 percent job placement rate to receive state vocational education

<sup>31.</sup> State of Tennessee, "Performance Funding Standards For Public Colleges and Universities," revised February 15, 1989.

funds, and California has enacted, although not yet implemented, a similar job placement standard for proprietary schools.

To identify schools that recruit students simply to obtain financial aid, placement rates for aided students can be compared with the rates for unaided students (see Table 4). Rates for students with financial aid that are substantially lower than the rates for unaided students may indicate a pattern of abuse. A similar analysis could be made to compare placement rates for ATB students with the rates for high school graduates. (Similar comparisons between aided and unaided students, ATB and non-ATB students should be made for indicators of occupational competency and program completion.)

Some states survey employers and students directly to determine job placement rates and assess satisfaction with graduates of vocational programs. A recent ED study found nine states currently conduct some form of employer survey. Most state surveys focus on graduates of public vocational programs. Finally, as requested by Congress, the National Center for Education Statistics is currently conducting a feasibility study to determine whether job placement rates can be reported by institutions under the Student Right to Know Act. This report is scheduled for submission to Congress by August 1991; its



<sup>32.</sup> Research and Evaluation Associates, "State Level Use of Employer Surveys to Assess Performance Outcomes in Postsecondary Vocational Programs," Draft, July 1991, prepared for U.S. Department of Education under contract EALC890010.

Table 4

<u>Labor Market Outcome Indicators</u>

<u>Measures</u>	Availability of Data	Sources of Data
Job placement rate	No	Student surveys, state wage records
Job retention rate	ИО	Student surveys, state wage records
Training-related placement	ИО	Student/employer surveys
Initial earnings	No	Student surveys, state wage records
Earnings growth	No	Student surveys, state wage records
Employer satisfaction	No	Employer surveys
Ratio between place- ment rate for aided students and non- aided students	No	Student surveys, state wage records
Ratio between place- ment rate for ATB students and all other students	No	Student surveys, state wage records

### Uses

Not currently used.
Could be used for
minimum standards,
performance contracts,
rewards for excellence,
consumer information
and system assessment.



conclusions will be based on all types of postsecondary institutions, not exclusively proprietary schools.

Using different approaches, several recent studies have estimated various labor market outcomes for students enrolled in postsecondary vocational education. With respect to proprietary school students, the National Assessment of Vocational Education found that about 26 percent of proprietary school students experienced unemployment during a 12-month period following training and that proprietary school students were placed in jobs related to their training about 66 percent of the time, for which they received an average wage of \$8.59/hour.33 Congressional Research Service (CRS) estimated employment rates of 77 percent for men graduating from proprietary schools and 74 percent for women. CRS found that male proprietary school graduales earned \$7.85 per hour and females earned \$6.47 per hour.34 A study by Norton Grubb that looked at long term economic outcomes found average hourly wages of \$8.93 for men with certificates from proprietary schools and \$7.22 for women with similar credentials.35 It should be noted that all these findings are averages for the entire population of students, and not for specific institutions.



<sup>33.</sup> Goodwin, "Postsucondary Vocational Education," Vol. IV, pp. 53-74.

<sup>34.</sup> Robert Lyke and Thomas Gabe, "Early Labor Market Experiences of Proprietary School Graduates" (Washington, D.C.: Congressional Research Service, 1991).

<sup>35.</sup> Norton Grubb, "Long Run Effects of Proprietary Schools on Wages and Earnings: Implications for Federal Policy," 1991, unpublished, Table 6.

The principal difficulty in measuring labor market outcomes on an institutional basis—as is required in a performance based system—is the inadequacy of data. Performance based systems that involve high stakes—where eligibility for student aid may be denied to schools on the basis of student performance—require a high level of confidence in the accuracy of the data. Safeguards need to be established to prevent distortion or lying in the reporting of data. There are other limitations as well. With respect to labor market outcomes, school-administered follow-ups of graduates are frequently characterized by high levels of nonresponse, and lack of objectivity by the school in determining when students are employed (or unemployed) or have been placed in fields related to their training.

Several strategies could be used to address these limitations:

- validate school generated survey results by selecting a random sample of graduates for independent follow-up. Several proprietary school accrediting associations apparently estimate placement rates and assess employer satisfaction by independently contacting a random sample of students and their employers.
- o Make more extensive use of state unemployment wage record data to measure employment and earnings. Because such information is provided by employers, it is objective, not subject to student recall, and can be used to measure both entry-level and long-term employment and wage rates.

ED currently has a study in progress to assess the feasibility of using state unemployment and wage record data to obtain information on earnings and employment of vocational program graduates. Preliminary evidence suggests that wage records, when



used with other existing data systems (federal employment, military, higher education enrollment), can be expected to provide labor market outcome data on from 60 to 80 percent of the students. This "hit rate" is substantially higher than the norm for school alumni surveys. Several other efforts to use the wage record data system are under way in JTPA, in the Department of Education, and in at least a half-dozen states. In reauthorizing the Perkins Vocational Education Act, Congress mandated additional studies of this resource by the National Occupational Information Coordinating Committee (NOICC) and the Office of Technology Assessment.

- Develop objective rules for determining when a job placement is "related" to a student's training. The National Assessment of Vocational Education built on work begun by (NOIC) to link fields of training to different occupational classifications. Tennessee has taken a similar approach in determining job related placements. More work needs to be done in developing such a "cross-walk" between training and jobs.
- o Where school surveys of graduates are used to determine job placement, raise the notoriously low response rates by 1) requiring a minimum response rate, with all nonrespondents above the minimum counted as nonplacements; or 2) treating all nonrespondents as graduates who did not get placed in a job. The latter approach is used in Tennessee.

<u>Learning Outcomes</u>. Measuring learning outcomes is far more complicated than measuring labor market outcomes. Methods of



<sup>36.</sup> In Florida, where the state has had considerable experience tracking students with the use of state wage records and other existing data sources, the "hit rate" is 75 to 80 percent for community college and university graduates. Other studies have obtained even higher hit rates.

<sup>37.</sup> JTPA requires a 70 percent rate and assumes non-respondents are distributed in the same proportion of employed and unemployed as respondents.

testing both general and occupationally specific knowledge and skills or competencies are available in a growing number of fields, but there are problems with the number of fields for which recognized tests currently exist and the adequacy of test content. Despite these problems, measures of general and specific occupational competency have the potential to provide a uniform measure of learning outcomes that is comparable across similar programs. In contrast, job placements may be affected by external factors such as local labor market conditions, student nonresponse, or school manipulation of the data.

There are three main ways (see Table 5) of assessing occupational knowledge and competency (see Appendix B for a more detailed discussion of occupational competency testing): (1) pass rates on state licensure exams; (2) tests developed by independent sources; and (3) tests developed by the programs themselves.

pass rates on state licensure exams. Not all fields are licensed, and licensing practices and standards may vary across states. Fields that are typically subject to licensing exams include cosmetology, health care, truck driving, electrical repair, certain trades, and real estate.

Fields that are not subject to state licensing exams include secretarial work, computer data processing, marketing, drafting, accounting (below the CPA level), and machine tool occupations. Fields not subject to state licensing represent more than 50 percent of total proprietary school enrollment. In fields where

Table 5

<u>Learning Outcome Indicators</u>

<u>Measures</u>	Availability of Data	Sources of Data	<u>Uses</u>
State licensing/ certification exams	No	States	Not used. Could be used to set standards of school eligibility for student aid, performance contracts,
Nationally recognized tests of occupational competency	No	Schools	rewards for program improve- ment, provision of consumer information and system assessment.
School-developed test of occupational competency	No	Schools	



state licensing exams are administered to program graduates, however, the rate at which students pass these exams is an appropriate measure of occupational competency.<sup>38</sup>

of occupational competency exams include the National Occupational Competency Testing Institute (NOCTI), 39 the Educational Testing Service (ETS), the Instructional Materials Laboratory at Ohio State University, the Vocational Technical Consortium of States (V-TECS), and the American Association for Vocational Instructional Materials (AAVIM) in Athens, Georgia.40

NOCTI is a private organization that has developed occupational competency tests in about 70 fields corresponding to programs offered in proprietary and public vocational schools.

Most of these tests, which include written and performance components, cost less than \$7 to administer. Other test vendors include the ETS, which has developed a limited number of occupational tests. V-TECS has developed a test "item bank" that states can use to develop tests tailored to a particular curriculum or local community.

Several states, including Colorado, Wisconsin, Michigan, and Florida, maintain centralized, state-level, test development agencies. These agencies develop tests used in fields subject to state licensing and certification. In other states, state



<sup>38.</sup> Some proprietary schools have said that states will report test results only to individual students, and not to the school. This problem would have to be resolved.

<sup>39.</sup> NOCTI has developed tests in approximately 60 different fields covering secondary and postsecondary training.

<sup>40.</sup> A study by the Office of Technology Assessment found, as of 1989, 13 states engaged in testing the occupational competencies of vocational and technical students, and 7 states involved in developing competency tests for vocational students.

departments of education have developed occupational tests that may be used as exit exams or for diagnostic purposes before students take a board certification test. In Oklahoma, such tests cover 55 to 60 percent of the occupational trades taught in state community colleges and public vocational schools.

Finally, various professional organizations have developed exams that may be used by states. Such exams exist in welding, cosmetology, and nursing. The National Council of State Boards of Cosmetology has developed tests for barbers (used in whole or part by 21 states), manicurists (26 states), general cosmetology workers (36 states), aestheticians, electrologists, and several other specialties.

# o Tests developed by the programs themselves.

Tennessee requires that institutions demonstrate that graduates are competent in their major field and that overall test scores improve over time. Where state licensing exams are not offered, several schools offering similar training must adopt or develop a common test. Schools may also develop their own tests. All tests developed are required to be validated by independent content experts and a psychometrician.<sup>41</sup>



<sup>41.</sup> Tennessee Performance Funding Standards.

Although researchers are working to identify occupational competencies and to measure the skills that students possess, much more work needs to be done to ensure that tests exist in all the fields they are needed and that these tests are of high quality. No systematic survey of available tests has recently been undertaken, but the best guess is that nationally recognized and normed tests of occupational competency do not now exist in many of the fields where proprietary schools offer training. Where content-valid occupational competency tests exist, they have been found to be highly valid predictors of job performance.<sup>42</sup>

Before any federal requirement that students be tested to assess their occupational competency is instituted, however, the range of available tests should be more systematically investigated.

In the meantime, a phased-in approach to assessment could begin with the fields where state licensing exams are administered or where other recognized tests of occupational competency have been developed. Pending further development, gaps could be filled with cooperatively developed or institutionally developed tests (the Tennessee approach).



<sup>42.</sup> John Bishop, "Occupational Competency as a Predictor of Labor Market Performance," unpublished, Cornell University, NYSSILR, 1988.

A second problem concerns test content. In response to proposals for more extensive and different ways of testing student learning, educational testing is undergoing many changes. Paper and pencil tests of occupational knowledge, the predominant approach in many occupational fields, may be replaced by alternative measures that gauge a wider variety of work relevant skills in a "hands on" manner. Competency tests developed by NOCTI and Oklahoma offer hands-on performance tests as one component of the testing program.

The report of the Department of Labor's Secretary's Commission on Achieving Necessary Skills (SCANS), suggests new approaches to measure learning for work-bound students. Whereas what students learn may ultimately be the best indicator of whether they have benefited from a job training program, the measurement of learning is difficult, and test quality is not uniform and may not be very high.

There is an important role for the federal government in encouraging the development of high-quality tests. Federal job training and vocational education programs--JTPA, JOBS, Vocational Education, and, in the future, perhaps student aidwill all have systems of performance standards in which the assessment of student learning is vital. An interdepartmental effort among the Departments of Education, Labor, and Health and Human Services to spur development of high quality occupational

competency tests may be justified. This should be undertaken as a long-term (five-year) effort.

Program Completions. The program completion rate, a key component of student attainment, is the ratio between the number of students who enter a program and the number who actually graduate. Because students may enroll briefly and quickly drop out before incurring any debt, an alternative definition of a completion rate may be limited to students enrolled long enough to have a student loan. Completion rates may be calculated to represent a simple average for a recent time period or to indicate changes (improvement or decline) for an institution.

In addition to the overall completion rate for all students, completions for particular subgroups may be of particular interest in the context of student aid policy (see Table 6). Two groups of special concern are students who receive federal financial aid and "ability to benefit" (ATB) students.

Meaningful measures of performance are to compare completion rates for aided and unaided students and for ATB and non-ATB students. These measures indicate the extent to which the benefits that aided students and ATB students get from their education are similar to the benefits that unaided and non-ATB students get.



Table 6
Program Completion Outcomes

<u>Measures</u>	Availability <u>of Data</u>	Sources of Data	<u> Úses</u>
Overall completion rate	Required under Student Right to Know Act, as of 1993	School .	Currently, withdrawal rates above 33 percent are considered an indicator of "administrative impairment" in certifying schools for student aid.
Completion rate change over time	Required under Student Right to Know Act, as of 1994	Sch <b>o</b> ol	Not used
Completion rate for recipients of federal student aid	No	School	Not used
Ratio between completion rates for aided students and nonaided students	ИО	School	Not used
Completion rate for ATB students	No	School	Not used
Ratio between completion rates for ATB students and all others	No	School	Not used $6\%$



Using nationally representative survey data, NAVE found completion rates of about 36 percent (within four years after high school graduation) among proprietary school students. 43 Completion rates are important, for studies have found that students who complete their training are much more likely to derive economic benefits than are students who do not. 44 According to the Congressional Research Source (CRS), "On average, men and women who completed proprietary schools had higher hourly earnings than those of their gender who only attended high school....For both men and women, no significant differences in hourly earnings were found between those who attended but did not complete proprietary schools (or any other schools) and those who only graduated from high school." 45

Completion rates will be available July 1, 1993, from data that schools are required to make available to students under the Student Right to Know Act. 46 Feasibility studies are also under way to assess the collection of more detailed data on the completion rates for various sub-populations, on the rates at



<sup>43.</sup> Goodwin, <u>Postsecondary Vocational Education</u>, p. B-2. Although the completion rate for proprietary school students may seem low, this rate is consistent with the rates for students in community colleges and public vocational schools. In contrast to community colleges, however, where most completers earn associate degrees, the majority of proprietary school completers earn certificates.

<sup>44.</sup> Ibid., pp. 70-71.

<sup>45.</sup> Robert Lyke and Thomas Gabe, "Early Labor Market Experiences of Proprietary School Students" (Washington, D.C.: Congressional Research Service, 1991), pp. 25-26.

<sup>46.</sup> Schools are not required to report completion rates to the Department but this could be mandated.

which individuals pass licensure and certification examinations, and on job placement rates. Although these feasibility studies do not include completion rates for students who receive federal aid and students who did not, or for ATB and non-ATB students, completion rate data could certainly be expanded to provide breakdowns among these categories. Thus completion rate data can be obtained at little additional cost by piggybacking on requirements in the Student Right To Know Act.

Multiple Student Outcome Measures. Occupational training has multiple goals. No single measure of student outcomes is likely to be an adequate indicator of program performance. Moreover, use of a single measure may result in perverse effects, as schools attempt to maximize their performance ratings. Exclusive use of occupational competency measures could encourage narrow "teaching to the test," job placement measures could promote the substitution of job search assistance or placement in low-quality jobs for more fundamental occupational training, and degree completion measures could result in a dilution of graduation standards.

If schools can be rewarded for doing well in one area (e.g., placement) but can ignore their responsibilities in other areas (student learning), student outcomes as a measure of program



performance may create undesirable incentives. Therefore, it is important that any federal policy in this area provide for multiple definitions of performance.

"Value-Added" and Improvement Measures. Performance outcome systems have a variety of objectives: to set minimum standards, to provide information to prospective students, and to encourage program improvement. Where program improvement is the goal, it is important that all institutions—not just the lowest performing (who wish to exceed minimum standards) or the highest performing (who may wish to compete for rewards)—have incentives to improve their performance. To ensure that all institutions are encouraged to improve, assessments of institutional improvement and "value added" should be incorporated in any measurement system.

Measures of institutional improvement reflect changes over time. All three types of student outcomes—labor market, learning, and program attainment—may be addressed as measures of institutional improvement. Value—added measures focus on average learning gains (differences between test scores for students before and after their training), rather than on gross levels of knowledge and skills. Value—added measures are one way to compare the amount of learning at schools serving students of different ability or educational background.



Where minimum standards of school eligibility for student aid are established, useful institutional comparison on the basis of student outcomes requires an adjustment for student characteristics (poverty, age, academic ability, high school graduation status), length of program, and local labor market These adjustments are important, for completion conditions. rates in programs that are one or two years long cannot be expected to be the same as completion rates in three-to-six-month programs. Similarly, completion and job placement rates and test score results at schools that serve highly disadvantaged students will be lower than those serving more advantaged students. the absence of a method to adjust for student and other characteristics, decisions will be based on how well schools have recruited and not whether the training provided has been helpful. Thus, adjustment of outcome data is another way to measure the value added.

One approach, similar to one described for measuring defaults, is to base assessment of a school's performance on the difference between (1) the actual rates for job placement, occupational competency, and program completion; and (2) a prediction of those scores based on students' economic and educational background. If some portion of payment to a school were contingent on meeting these performance standards, schools would have an incentive to admit only students who they believed could benefit from the training offered.



Performance Funding. Performance measurement is likely to be most meaningful when outcomes are tied to funds. If the financial consequences of poor performance are indistinguishable from the consequences of superior performance, the system is likely to be perceived as irrelevant. In the context of student aid, performance funding could take several forms:

- c <u>Eligibility</u>. Minimum standards could be set for schools seeking eligibility for student aid. Eligibility could be removed if a school falls below these standards.
- o <u>Performance contracting</u>. Some portion of student aid funds could be held back, contingent upon student completion, placement, and retention in a job for 90 days. This practice would be similar to JTFA performance contracting and would probably require special financial arrangements with banks or guarantee agencies.
- o <u>Consumer information</u>. A well-developed consumer information system could have a major effect on the reallocation of student aid resources from institutions that were performing poorly to better ones.
- o <u>Deregulation</u>. Schools that do well on measures of student placement, learning and completions could be rewarded with fewer reporting or audit requirements.

## Phasing in the System

Development of a fully operational performance based system will take several years, and will require periodic fine-tuning thereafter. A comprehensive system would be designed to meet several goals: setting minimum standards, encouraging program improvement, providing useful consumer information, and assessing the system as a whole. It would employ multiple indicators to evaluate a school's performance, weigh relevant background



characteristics of students, and rely on data that is not readily subject to self-serving manipulation.

Ways to phase in such a system over a four-year period include the following:

- o Establish an external performance indicators panel--year 1.
- o Measure defaults adjusted for student background characteristics--year 1.
- o Initiate pilot projects with three states and three accreditation agencies to develop, test, and demonstrate performance measurement systems in accordance with student outcomes. Results should be tied to state licensing and accreditation. Provide planning grants in year 1, followed by grants to support start-up implementation in years 2 and 3.
- o Replace default rates with a composite default index based on multiple measures of default--year 2.
- o Develop statistically valid indicators to identify potential financial abuse and institutional insolvency. Tie investigations and, ultimately, base recertification on results--year 2.
- O Create a national standard for program completion on the basis of data that schools are required to report under the Student Right to Know Act; exempt schools subject to standards developed through pilot projects. Add other standards based on job placement and state licensure/certification pass rates, if such information becomes available through that Act--year 3.
- o Following evaluation of the pilot projects, require states/or accreditation agencies to adopt performance measures and standards that measure labor market outcomes, student learning, and program completions-year 4.

## Conclusions

Like many other federal programs, student aid is moving toward a performance-based strategy to evaluate schools that provide



education and training. The elimination of institutions with high default rates from the student aid program constitutes only a rudimentary system of performance indicators.

This report reviews alternative indicators of school performance that would be meaningful in the context of student aid, and the different purposes for which indicators may be employed. The report is limited to performance indicators that are appropriate for assessing proprietary school performance, although the approaches discussed are applicable to other types of institutions as well.

Recent legislation requires that high default institutions be eliminated from the student loan program. The use of gross default rates to measure a school's performance is motivated by a need to reduce the large financial losses caused by defaults and by a belief that high-default institutions are unlikely to provide good quality education. The default rate indicator is also attractive because it can be readily implemented with existing data. A significant limitation is that this measure strongly reflects student background characteristics that also affect the propensity to default. Another problem is that default rates focus exclusively on the frequency of default and not on other important dimensions of the problem: the number of loans, school dependence on loans, and the amount of money in default.



Although default rates represent a short-run response to valid and significant problems facing the student aid program, several ways to enhance ED's current approach are suggested. A composite default index could be developed that, in addition to the student default rate, considers the dollar default rate and the extent to which an institution depends on federal student loans (percentage of borrowers under the Guaranteed Student Loan Program).

Given the very strong effect that student characteristics have on default, an adjustment model could be developed that holds schools accountable where actual loan defaults exceed a level predicted on the basis of student characteristics and compares default rates at schools serving similar populations. Much of the information needed to begin such an approach to defaults is available or can be obtained.<sup>47</sup>

This report reviews the role that financial risk indicators can play in making decisions about initial certification, recertification, and program review. Financial risk indicators are important to protect students from insolvent institutions and to protect taxpayers from abuse of Title IV funds. Much more can be done to enforce existing rules in determining eligibility for student aid.



<sup>47.</sup> Information that would need new data collection includes the percentage of borrowers at a school and the extent to which borrowers are ATB students.

Because federal liabilities mount rapidly once institutions have entered the student aid program, more frequent and timely review to identify potential abuse of student aid funds is warranted. This requires improved data systems to provide more timely data (e.g., on GSL volume, defaults, and percentage of students on financial aid) and to provide information that is not currently available (e.g., the adequacy of financial arrangements if school fails, percentage of ATB students, percentage of school revenue from federal student aid, and percentage of revenues spent on instruction and recruitment).

It is also recommended that ED develop a statistically valid high risk profile to identify potentially insolvent institutions and institutions likely to misuse the student aid program. Much can be done to implement these recommendations with existing data, but new data requirements and statistically valid indicators could take two to three years to develop and put in place.

This report concludes that student aid should ultimately move in the same direction as other vocational education and job training programs—toward accountability based on student outcomes. Three broad types of outcomes are discussed: labor market outcomes (e.g. training—related placements, job retention, wages, employer satisfaction); learning outcomes (e.g., passing state licensure/certification exams, other tests of occupational



competency); and program completion outcomes (e.g., overall completion rate, aided and nonaided student completion ratio, ATB and non-ATB completion ratio).

Labor market outcomes, student learning, and program completions can each be measured to estimate institutional performance at one point in time or to indicate program improvement by comparing change over time. Measures of institutional performance at a particular time are most useful in performance indicator systems designed to set minimum standards or to provide consumer information. Long-term program improvement measures are more commonly employed to encourage all institutions to improve and to allocate rewards on the basis of school performance.

Labor market outcomes, student learning, and program completion are all important indicators by which proprietary school performance may be measured. A balanced system should include measures in each of these areas, although not necessarily all the examples discussed here.

In contrast to the data needed to measure defaults and financial risk, virtually none of the information required to measure student outcomes is currently available to ED. Although the Student Right to Know Act requires schools to report completion rates beginning in 1993 and feasibility studies are



underway to determine whether job placement and pass rates on state licensing exams can be obtained, much work will be required to define outcomes, to develop measures, to specify standards, to establish data collection systems, and to ensure the accuracy of information collected.

Assessment of schools on the basis of student outcomes is a long-range project, although some elements could certainly be phased in sooner (completions, placements) than others (occupational competency). A strategy for phasing in such a system including the initiation of pilot demonstration programs involving states and accrediting organizations is outlined. If effectively implemented, an emphasis on student outcomes could complement and perhaps replace default rates and financial abuse as primary indicators of school performance.

The role that program inputs (facilities and equipment, faculty training, curriculum, instructional methods, support services, and student assessment) may play in a performance indicator system has also been reviewed. No evidence was found of a clear and consistent relationship between various school inputs, when measured quantitatively, and school effectiveness. In most cases the only meaningful way to consider school inputs is through on-site program reviews, such as those conducted by accrediting agencies and some states. Such reviews are inherently subjective and do not produce quantitative results



that permit systematic comparison across institutions. Future improvements in this area are unlikely to come from new quantitative measures, but will probably come from changes in the organization and procedures by which accreditation and state licensing are conducted. The nature of those changes is beyond the scope of this report.

It is strongly recommended that ED go beyond primary reliance on one indicator of program performance—default rates—to a system that contains multiple measures. Multiple indicators provide a comprehensive picture of school performance, minimize the effects of measurement error in any single dimension, and discourage any unintended or perverse responses designed to "get around" a single indicator of performance.

Using many indicators, however, can undermine a performance-based system by increasing complexity, burden, and duplication. This report has discussed a large number of illustrative indicators. An efficient system would use a limited number of basic indicators representing different outcomes.

Experience demonstrates that performance indicators have the potential to create unfair comparisons among schools serving different types of students or to encourage creaming (the enrollment of students who are least likely to default or easiest to place in jobs). Creaming could reduce the access of



disadvantaged students to postsecondary training-an outcome contrary to a basic objective of the Higher Education Act.

Adjusting expected outcomes for the characteristics of students would reduce the likelihood of creaming. On the other hand, it could lead to lower expectations for the performance of certain groups of students. Setting standards that require schools to substantially exceed predicted levels of performance would create demanding expectations and provide a tool for program improvement. There is ample evidence from JTPA and elsewhere of different ways in which this may be done.

Movement throughout the federal government toward performance-based systems raises some problems that are commonly faced by all programs that involve vocational education and job training.

Designing ways to gain better access to state wage record data to determine whether job placements are related training, and to measure occupational competencies would be most efficiently undertaken through a joint inititiative by the Departments of Education, Labor, and Health and Human Services.

Finally, although this paper has not recommended a specific government strategy for implementing performance based policies, in most cases, ED will be unable to operate such a system without the assistance of others. Appropriate roles need to be devised for states, for accreditation agencies, and for the federal government. In this regard, federal policy should recognize



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other accountability systems that may exist as a result of state or other federal initiatives, and thus avoid unproductive conflict or inconsistency. For example, piggybacking on "completion rate" data collected under the Student Right to Know Act is preferable to instituting new data collection, with new definitions and requirements. Coordination of performance standards being developed under the Vocational Education Act with those that might develop through student aid would avoid gross inconsistencies in the way that job training programs are held accountable.

ED/OUS 91-40



#### APPENDIX A

## SUMMARY OF MEETINGS WITH REPRESENTATIVES OF PROPRIETARY SCHOOLS\*

In order to gain insights on how accreditation and certification operate in different segments of the proprietary sector, Westat conducted three focus group meetings with leaders, owners, and or representatives of proprietary schools. These participants were selected based on recommendations from their accrediting agency and/or other knowledgeable persons in the field. The three meetings were held in the Washington, D.C., area and involved the following groups:

- Cosmetology Schools, April 16, 1991 Ritz Carlton, Pentagon City.
- Business and Secretarial Schools, April 26, 1991 -Holiday Inn-Capitol, Washington, D.C.
- Electronics Schools, May 3, 1991 Holiday Inn-Capitol, Washington, D.C.

These sessions involved lively discussion of many aspects of the operation, accreditation, certification, and measures of success of schools in these different segments of the proprietary sector. The dialogue provided many useful insights into the realities of performance assessment in different settings and in diverse occupational specialties.

Each session was moderated by a member of the Westat Project Team, and featured active participation by other members of the Westat Team and by staff from the U.S. Department of Education. A professional writer serving on the Project Team took notes at each meeting and produced the following, written summaries of the most important points that were discussed.



<sup>\*</sup>Prepared by Westat, Inc. under Contract #LC89082001

## FOCUS GROUP DISCUSSION WITH COSMETOLOGY EDUCATORS

On April 16, 1991, U.S. Department of Education representatives, research consultants, and members of the Advisory Council on Cosmetology Relations in Education convened to discuss indicators of program quality, and accreditation and program review issues pertaining to cosmetology training.

#### Indicators of Program Quality

According to panel members, placement percentages, state board scores, loan default rates, the number of program hours completed, starting wages, and the number of individuals holding licenses are not sufficient, alone, as indicators of quality for judging cosmetology schools. These factors do, however, reflect the variability among schools and states, and among different proprietary school fields.

For example, one panel member stated that a 100 percent placement rate may be the result of high demand for licensed employees to service a "hot" field, not of the quality of instruction. He added state board scores reveal little regarding program quality, because state boards are not testing current techniques and applications. Furthermore, many schools are preparing their students to enter the job market, not necessarily to pass an "outdated" state board exam.

It was noted that in Texas state boards are up to date, and that default rates reflect the nature of the students and not the schools. Another panel member concurred. He stated many of his students were graduated, employed, and currently working, but, for whatever reason, have defaulted on their loans. The rates may indicate something is wrong, but unlike a student-success indicator, they do not reflect the quality of instruction.

The default statistics often are misleading. A student who has missed several payments, but is currently making regular payments, is listed as in default. Moreover, lenders often are too hasty in moving loans to default and selling the paper to collectors.



Several panel members indicated states differed substantially regarding the length of training (which averages between 1,500-1,800 hours), starting wages, and curricula (some states base the exams on the curriculum, others test skill levels). They noted the first and last of these factors do not influence starting salaries. Many also agreed that the number of registered cosmetologists does not equal the number of practicing cosmetologists. Accurate statistics do not exist--people hold on to their licenses to get discounts and individuals train and enter the market sporadically.

Having noted poor indicators of program quality and that a single, national standard would be unacceptable, panel members agreed that key indicators should include data from student follow-up assessments regarding level of satisfaction and achievement, retention and completion rates, and employer surveys that measure how well the schools are meeting their needs.

One panel member warned against the use of a single statistic, or an absolute score, as an indicator of program quality. He would prefer a composite of different components. Another comment was that the industry should compile statistics on standard wages, number of actual working cosmetologists, entry level criteria, benefits, and top-earner characteristics to help structure indicators. One panelist added: "Rather than an arbitrary benchmark, send more Education Department reviewers to observe outcomes. Require schools to perform regular checks. Here is where you determine ability."

## Characteristics of a Successful Program

Successful programs meet the needs of the industry. They maintain a competitive edge with the quality of their curricula and ability to diversify. For example, job demand, salon requests, and personal referrals may indicate a field is growing and the need to create subspecialties to respond to a particular trend. Competitive schools allocate minimum hours for those who just want individual courses, and thereby meet students' needs. One panel member, who believes referrals (by former students) represent 70 percent of enrollment figures, said satisfied students indicate the school is successful.

Although many states impose limits on the types of courses cosmetology schools are allowed to offer, many maintain a competitive edge with an enriched program. Some offer a full range-from basic proficiency to management training courses. Those states allowing discretionary hours support schools' efforts toward building enhanced programs.



According to the panel, what hurts many schools is their dependence on financial aid. It was argued that liberal lending policies are a disservice to schools and not in the best interest of students.

According to another panel member, high-quality training is essential. Although uncertified individuals can be hired without training, technological improvements in the field, new chemicals, the need for proper instruction on the use of dangerous chemicals, and liability issues ensure that most employers will require properly trained employees. This motivates schools to keep their standards high.

#### Accreditation and Program Review Issues

It was related that the Commission's award of accreditation is good for five years. The Commission can, however, review each school at any time. Financial problems were not the most common reasons for denying accreditation. The most common offenses include policy, enrollment, program, and admissions issues.

Panel members claimed significant differences exist between accredited and nonaccredited schools. As a result of accreditation policies, the industry has become sophisticated and schools' operations have become more structured. Also, established standards enable fair comparisons among ratings of schools. Panel members contrasted the advantages accreditation has brought to the industry with the shortcomings of the Education Department's reviews. One ED reviewer was described as "ensconced in the office reviewing financial aid files." With such a limited focus on the school's ability to follow requirements (such as posting, signing, and handling financial aid refund forms), reviewers cannot appreciate and monitor the broader and more meaningful characteristics defining each school.

One panel member complained of too many audits from too many agencies. Another recommended cooperation between governing units. He believes quality audits are best addressed by the accrediting board and financial audits by the Department of Education. "We need mutual reinforcement that recognizes separate functions."



### Recommendations for Lowering Default Rates

- 1. Develop a composite profile of high-risk students using factors such as family background, level of education, income level, and number of dependents; and compensate schools for servicing these high-risk students.
- 2. Allow lending agencies and the government to support the school's efforts to collect from defaulters, by disclosing pertinent information.
- 3. Develop more sophisticated default measures; recognize the size of the loans with the default rate.
- 4. Alter the program, which currently requires repayment to begin six months after graduation, which for many is too short an interval.
- 5. Encourage loan-servicing agencies to maintain the loans or at least keep them in-state.

# FOCUS GROUP DISCUSSION WITH REPRESENTATIVES OF BUSINESS AND SECRETARIAL SCHOOLS

On April 26, 1991, U.S. Department of Education representatives, research consultants, and representatives of business and secretarial schools convened to discuss indicators of program quality, and the roles of the federal government, accrediting agencies, and state licensing authorities in assessing the quality of institutions.

## Indicators of Program Quality

According to the three panel members, placement and default rates of proprietary institutions are poor indicators of program quality at business and secretarial schools. Members said these rates do not take into account the effects of environmental and cultural factors; and the term "proprietary" is not defined with sufficient precision to accurately reflect the status of business and secretarial schools.

For purposes of this discussion, a proprietary institution was defined as a "profit-making institution that offers short-term, occupationally oriented, vocational and technical training." Nevertheless, panel members insisted that programs should be divided further according to factors such as public or private control; degree or nondegree granting; region; type of training; educational mission (occupational or educational goal); and length of program.



One panel member also compared characteristics of court reporters, diesel mechanics, truck drivers, and nursing assistants to show how cultural factors and job occupations, not program quality, affect placement and default rates. He said enrollees in court reporter programs typically aspire to a middle-class status and have a high drop-out rate due to the English language proficiency and manual dexterity requirements of (According to several panelists, the court reporting. institution cannot screen for those who are destined to "top out" on a needed skill half-way through the course.) These students also have low completion, high placement, and low default rates. On the other hand, diesel mechanics also are well placed, earn a good salary, and repay their loans, he said. Truck drivers come from farm/rural areas, have a good placement rate, but a high default rate. And, nursing assistant students, who typically are single-parents, with an inner-city and welfare heritage, have a high dropout rate. One discussant also cited a study that showed default rates do not differ between those who drop out from the nursing assistant program and those who are placed.

The panel agreed that indicators of program quality are needed; however, they believe the Department of Education (ED) should first categorize institutions fairly and then only compare default rates of schools serving similar students. ED also should require annual, independent, certified public accountant audits, said one participant. Panel members agreed that fiscal responsibility and faculty competence are important factors in evaluating the quality of an institution.

## Roles in Assessing Quality

One panelist asserted it is the federal government's responsibility to set standards for student outcomes, learning, and minimum thresholds. Because ED provides the money, said another panelist, it should set the standards and regulate compliance. Another was opposed to instituting national tests to set a standard for quality because of the variability within and among occupations. He noted that the tests used within schools to monitor progress and certify completion do not necessarily measure the skill that will be used on the job. One panelist warned participants that imposing occupational objectives on institutions that are degree-granting will not work, but added, this could be clarified in ensuing legislation.

Panel members said data for setting placement ranges and enabling valid comparisons between similar institutions exist and are easily accessible to the government's agencies. The federal government need not devise new federal standards.



According to one panelist, the roles of state licensing authorities and accrediting agencies are not mutually exclusive in spite of their differences. He characterized licensing as a static process that is administered externally and measures a minimal level of compliance. Whereas the licensing agency should be responsible for constant monitoring, said one panelist, accrediting agencies should take periodic "readings" to assess an institution's status. He said the accreditation process is dynamic and operates on peer review, not a system of minimums.

Another panelist said the accreditation process forces institutions to develop long-range, strategic plans. These plans can be developed into workable documents that provide criteria (qualitative, albeit subjective, data) for determining the quality of an institution. But another participant believes industry, not accreditation agencies, is better able to set the indicators of quality. He described three types of accreditation (program, regional, institutional) and two administrative operations—a certification agency to read and ensure proper execution of administrative and financial regulations and an eligibility agency, which addresses an institution's form and structure.

#### Continuing Concerns

Panel members reiterated their frustration at ED's use of the term "proprietary" to describe business and secretarial schools along with institutions that are fundamentally, characteristically, and operationally different. They also reexpressed their concern that the federal government does not take into account mitigating factors such as the nature of the student population and the location of schools when characterizing institutions with default rate data.

Recommendations for lowering the rate were not forthcoming; however, one panelist offered his belief that servicing agencies and lenders are part of the problem of high default rates. For the following reasons business and secretarial schools should not be penalized for their default rates:

- 1. Schools have no control over who gets a loan. They are unable to screen high-risk applicants.
- 2. Schools are precluded from learning about the students in default.
- 3. Students who were in default and began repayment are still considered in default.
- 4. Schools do not decide when the money is awarded (GSL borrowers, who have a lower dropout rate receive their money 30 days after school begins.)



One of the panelists provided an extensive set of position papers and data on default rates for different types of business and secretarial schools, definitional issues relating to the term "proprietary," and other related matters.

## FOCUS GROUP WITH DIRECTORS OF ELECTRONICS SCHOOLS

On May 3, 1991, a U.S. Department of Education representative, research consultants, and directors of electronics schools convened to discuss indicators of program quality and factors that help and hinder school operations.

#### Program and Student Profile

According to the directors of electronics schools, these institutions offer a variety of programs that can be completed within six to 24 months. Upon completion a graduate can earn a certificate or Associate of Arts degree. Not all schools require admissions testing; however students must have a high school diploma or GED to enroll. Some schools require their students to take a final, comprehensive examination at the end of the program. Other schools prepare the students and encourage them to take an exit test for occupational competency.

The differences between schools with six-month programs and those with 24-month programs are not reflected in the placement rates of graduates, said one director. According to another director, neither is there a difference in the marketability of students completing the 12- and 18-month programs. He added, the Associate of Arts degree is designed to help graduates earn promotions, after they have been hired.

The directors described electronics students as needing extensive support in nonacademic areas. Often the students were unable to survive or learn in traditional secondary educational settings. The electronics students considered most likely to be graduated and placed are white, male, single, recent high school graduates. Panel members said older, female, and minority students are less likely to complete their training because of familial and financial concerns.

One director said employers want to hire minority and female graduates. However, another noted that those with families often are more ifficult to place, because many jobs require relocation. One directors' recommendation for increasing retention and graduation rates is "give these people grants, and child care, and work study--no loans." He added the loan system has numerous problems that create additional barriers for the already overburdened student.



#### Characteristics of "Good" Schools

Two panelists maintained that there are no "good" or "bad" schools; the terms describe people. They stressed that proprietary schools in general have a poor image and that few observers recognize the tremendous work involved in training and ensuring gainful employment for a segment of the population that is labelled "the refuse of the secondary system." This image is exacerbated when success stories and anecdotal information are ignored and only the data based on maintaining accountability in traditional school systems are reported.

Another director concurred, however he noted that good schools have an admissions office that is geared to be an advocate for prospective students. He said admissions testing is a tool that helps assess the probability of the school's success and the potential of the student. According to this panelist, employers test prospective employees as well as set minimum competencies. Therefore, successful schools must be market responsive. This director criticized schools that focus on advertising and recruitment, but lack libraries and sound safety programs.

#### Indicators of Program Quality

Panel members said default, completion, placement, and starting wage rates do not indicate quality of electronics programs because they are not "sufficiently broken down." These rates blanket critical data describing their schools and student populations and do not account for idiosyncrasies (such as program choice) in the field. For example, one panelist said automotive students tend to have low family income, high financial aid needs, high default rates, and high drop out rates. One may not expect these individuals to succeed, yet they still find employment.

The directors said factors such as family income and retention on the job affect the default rate, but they really predict student behavior and do not indicate school quality. To assess quality, one panelist recommended that reviewers focus on growth potential instead of starting wage. A graduate might earn a low wage <u>initially</u>, but can do very well within two years, said another director, because many employers have their own training programs. They specifically look for trainability, appearance, and a foundation in electronics. They then train their employees to operate their equipment. One director also added, that where possible, articulation ability should be assessed. In areas where colleges are proximal, it would indicate that the curriculum is worthy of transfer.



One of the panelist believes evaluations of a school's admissions process; the educational background of the faculty; management, staff, and faculty turnover rates; and a school's ability to keep pace with changes in technology and machinery can serve as indicators of program quality. Another advocated a "value added" approach, which involves assessing the student upon enrollment as well as upon graduation. He suggested other indicators such as faculty-student ratio and the viability and longevity of schools.

#### Agency Roles

According to one director, accreditation bodies are interested in quality, not regulations. And although another director thinks the accreditation system works, he also thinks electronics schools are overregulated because of state, federal, and sometimes county guidelines that must be observed. One panelist recommended that the governing/reviewing agencies synchronize their reporting requirements and share appropriate information without being competitive. Two directors remarked that state licensing agencies lack the authority to "do anything about schools they do not want to license."

### Recommendations for Lowering Default Rates

The default rate is not a school problem, it is a student problem, said one director. Published default rates, which always are a few years behind, do not break down to the contributing elements, and worse, they mask other problems. For example, one director said 40 to 50 percent of his students come from other secondary institutions. If any of these students defaults on a loan, even a loan incurred at the former school, that student is listed as a default statistic of the electronics school (i.e., the students' deferment becomes the electronics schools' default statistic).

To simply lower the default rates, it was suggested that schools can (1) change admission standards; (2) run credit tests; and (3) change their programs. However, these measures would bar the high-risk student, the one most in need of financial aid and social support, from an opportunity to become a productive member of society.



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The directors suggested a variety of ways schools, financial agencies, and the Department of Education can help lower default rates.

The panel recommended that schools:

1. Implement a default management program (i.e., send registered letters (reminders) after the student is graduated, and followup 30- and 60-day reminders).

The panel recommended that lending agencies:

- 1. Set disbursement schedules to correspond with the periods of attendance; and
- 2. Make the students pay.

The panel recommended that ED:

- 1. Tighten the branching procedures and policies;
- 2. Ensure that loan and service agencies are close to the school (if possible); and
- 3. Scrutinize cooperating financial institutions (are all loans coming from or being serviced by one institution?).

#### Appendix B

## OVERVIEW OF OCCUPATIONAL COMPETENCY TESTING IN PROPRIETARY SCHOOLS<sup>1</sup>

Proprietary schools typically do not administer standardized occupational proficiency tests to their students. Testing is, however, carried out to state licensing agencies in many occupations for which proprietary schools provide training. In addition, increasingly states are developing occupational competency tests for trades taught in state vocational technical education programs. Many of the same occupations are also taught in proprietary schools. This report discusses the availability of tests from both these sources. The report also discusses research on the reliability of occupational competency tests and several caveats offered by researchers on the use of these items in developing standards of performance.

### Testing Through State Licensing Agencies

The states oversee more than 1,000 occupations and professions through licensure, certification, the number of occupations licensed varies from state to state, or simple registration. The range of these occupations is extraordinarily diverse, and in the field of cosmetology alone, more than 20 different specialties are regulated in one state or another. For example, in cosmetology, every state requires a license for cosmetologist/hairdresser but only one - Oregon - licenses facial technicians.<sup>2</sup>

The picture is similarly diverse with respect to the prevalence of competency testing as part of the licensing process. Again, different states test in different occupations. No national data are available on the number of occupations in which licensing tests are carried out, so it is difficult to determine how many states give licensing tests for occupations taught in proprietary schools. As discussed later, the available data do allow some broad generalizations to be drawn about the prevalence of



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<sup>1.</sup> Prepared by Westat, Inc., under Contract #LC89082001.

<sup>2.</sup> Brinegar, Introduction and pp. 26-28.

competency testing by broad program area.

The distribution of 1988-89 proprietary school enrollment, by program area follows.

Program Area	Percentage of Proprietary Students Enrolled
Word processing, secretarial, and other business/marketing	42
Cosmetology, barbering, and 14 other personal services	14
Medical, nurse assistant, and other health care occupations	7
Computer, electronics, and other technology	25
Construction, welding, and other trades/industrial	7
Truck driving and other transportation	Less than 1
Other	5
	1.00

According to a 1990 survey by the National Clearinghouse on Licensure, Enforcement, and Regulation, no states regulated word processing, secretarial, or related occupations, and only a few states regulated technology occupations. Thus, for the two largest proprietary school fields, which represent more than two-thirds of enrollments, state licensing examinations are largely unavailable.



<sup>3.</sup> Apling, p. 13.

<sup>4.</sup> Brinegar, Introduction and pp.26-28.

In those proprietary school occupations in which the states do test, there is little national standardization. Test philosophies and composition vary from state to state, as illustrated by two of the states reviewed in this study: Pennsylvania and Colorado. Since 1980, Pennsylvania has required that all licensing tests be developed, prepared, scored, and administered by qualified third party test developers. In the late 1970s after becoming concerned about the validity and reliability of state board exams, Pennsylvania decided to take test development and administration out of the hands of the state boards and to contract the exams out to private test development firms. The state believes that performance tests are less valid than written, multiple-choice tests for measuring occupational competency and thus only written tests are used in Pennsylvania. Colorado, by contrast, maintains a centralized test development agency in the state government, and nearly all the state's licensing tests are developed by that state agency. Also, unlike Pennsylvania, Colorado uses performance tests in conjunction with written tests.

There are a few exceptions to this prevailing lack of standardization. In several proprietary school occupations, national associations have developed competency tests used by many states. These occupations include: cosmetology (Interstate Council of State Boards of Cosmetology); nurse's assistant, aide (National Council of State Boards of Nursing); welding (American Welders Society); construction occupations (American General Contractors' Association); and automotive repair (Automotive Service Institute).

# Testing Under State Vocational/Technical Education Programs

An increasingly important source of standardized occupational competency tests is the state vocational technical education programs. According to a 1989 report of the Office of Technology Assessment (OTA), the states have become very active in the development and use of occupational competency tests, largely in response to the increasing emphasis on performance measurement and accountability in education and training programs.



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According to a 1988 survey, 13 states were testing the occupational competencies of vocational and technical students and an additional 18 states were either in the process of developing tests or considering development (see Figure 1). In contrast to the examinations given by state licensing agencies, vocational technical education achievement tests include achievement tests for occupations commonly taught in proprietary school such as secretarial, office, and technician occupations. Analysis of the examinations would be required to determine whether they would, in fact, be appropriate for measuring achievement in proprietary schools.

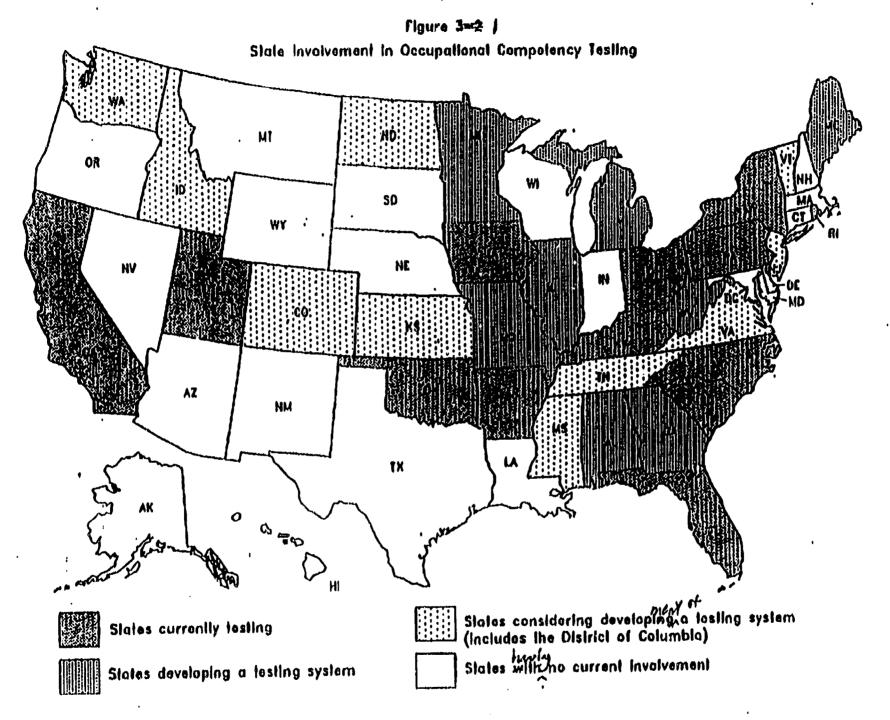
Many states have formed consortia to pursue the costeffective development of competency-based curricula and tests. Two of these consortia are the National Occupational Competency Testing Institute (NOCTI) and the Vocational Technical Consortium of States (V-TECS). According to its recent materials, NOCTI has developed written and performance competency tests in more than 60 secondary and postsecondary fields; V-TECS has developed tests in 24 occupations and has 18 more under development. In addition to consortia-developed tests, several states have taken the initiative in developing their own tests. A notable example is Oklahoma, which has one of the most advanced competencybased curriculum and testing systems in the country. Oklahoma has developed test batteries of 168 occupations, each of which has three components: a traditional multiplechoice test, a test of decision-making skills within the occupation, and a performance test.

### Reliability of Occupational Competency Tests

In its review of the state of the art in occupational competency testing, OTA found evidence that specific occupational competency tests correlate strongly with job performance. One study cited in the OTA report synthesized the results of 262 studies of occupational competency tests and concluded that there was a high correlation between test scores and supervisors' ratings of job performance. The correlation was higher than that of other predictor variables such as ability tests, interviews, and biographical inventories. According to OTA, other studies have reached similar conclusions.



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SOURCE, Office of Technology Assessment, based on data from Rebecca Leve-Vilkes. 1988 State of the Art. Aspect on Statewide Student Competency Jesting in Vocational and Technical Education (Missiesippi State, MS; Research and Curriculum Unit for Vacational, Technical and Adult Education, 1988).



However, OTA cautions against overreliance on occupational competency tests and argues that they should not become the sole basis for performance standards. Among the reasons for caution were these:

- It is never possible to know how much of an individual's abilities can be attributed to a school or program. Socioeconomic and other correlates of test performance may also be factors.
- There is a risk that schools will coach students on test-taking strategies at the expense of actually teaching the occupational skills themselves.
- Overreliance or occupational competency tests could result in overemphasis on learning highly specialized skills at the expense of more broadly applicable generic skills.

Furthermore, one of the advantages that proprietary schools claim over public vocational technical training is their ability to adjust quickly to marketplace demands. As employers request training in new technologies and methods, proprietary schools adjust the content of their programs. It is doubtful that occupational competency tests can adjust so quickly to test these new skills.

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